Access DB# 124703

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jeffrey E. Russel Examiner #: 62785 Date: 6-15-2004
Art Unit: 1654 Phone Number: 571-272-0969 Serial Number: 10/049,718
Mail Box and Bldg/Room Location: REM 3011 (mailbox), 3D19 (office) Results Format Preferred (circle): PAPER DISK E-MAIL
If more than one search is submitted, please prioritize searches in order of need. MEJ

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Melanocortin Metallopeptide Constructs, Combinatorial Libraries And Applications

Inventors (please provide full names): S. Sharma, Y. Shi, Y. Wei, H. Cai

Earliest Priority Filing Date: 2-13-2002

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

I'm looking for peptides which end with the following sequence: (Phe or Trp or Tyr) – (Arg or His or Leu) – Cys.

In other words, Cys ~~~~ is at the C-terminus.

Maybe search the above with SQL = 3, then search X – (F or W or Y) – (R or H or L) – C with SQL = 4, etc. up to SQL = 8?

Thank you.

JER

STAFF USE ONLY

Searcher: Noble / Jan
Searcher Phone #:
Searcher Location:
Date Searcher Picked Up:
Date Completed: 6/21/04
Searcher Prep & Review Time: 60
Clerical Prep Time:
Online Time: 60

Type of Search

NA Sequence (#)
AA Sequence (#)
Structure (#) 2
Bibliographic
Litigation
Fulltext
Patent Family
Other

Vendors and cost where applicable

STN ~~349~~ 763
Dialog
Questel/Orbit
Dr.Link
Lexis/Nexis
Sequence Systems
WWW/Internet
Other (specify)

PTO-1590 (8-01)

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=> d his

     (FILE 'HOME' ENTERED AT 08:49:54 ON 21 JUN 2004)

     FILE 'HCAPLUS' ENTERED AT 08:50:00 ON 21 JUN 2004
                E SHARMA S/AU
L1           906 E3,E11-12
                E SHARMA SHUBH/AU
L2            53 E3-5
                E SHI Y/AU
                E SHI YI-QUN/AU
                E SHI YI QUN/AU
L3            11 E3
                E SHI Y Q/AU
L4            14 E3
                E YANG W/AU
L5           915 E3-29
                E YANG WEI/AU
L6          1001 E3-87
                E CAI H Z/AU
L7             1 E3
                E CAI HUI/AU
L8            91 E3,E16
                E BLOOD C/AU
L9            13 E3,E9-10
                E SHADIACK A/AU
L10           21 E3-7
L11          138 PALATIN?/CS,PA
L12           17 L1-11 AND MELANOCORTIN/TI
L13            3 L12 AND METALLOPEPTID?
                SEL AN L13 1 2
L14            2 E1-4 AND L13

=> b hcap
FILE 'HCAPLUS' ENTERED AT 08:56:48 ON 21 JUN 2004
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FILE COVERS 1907 - 21 Jun 2004  VOL 140 ISS 26
FILE LAST UPDATED: 20 Jun 2004  (20040620/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d all l14 tot
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L14 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **2002:637480** HCAPLUS
DN 137:190724
ED Entered STN: 23 Aug 2002
TI **Melanocortin metallopeptides** for treatment of sexual dysfunction
IN **Sharma, Shubh D.; Shi, Yi-qun; Yang, Wei; Cai, Hui-zhi; Shadiack, Annette**
PA **Palatin Technologies, Inc., USA**
SO PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 2
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002064091	A2	20020822	WO 2002-US4431	20020213
	WO 2002064091	A3	20030313		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	US 2004038897	A1	20040226	US 2003-640755	20030813
PRAI	US 2001-268591P	P	20010213		
	WO 2002-US4431	A	20020213		

OS MARPAT 137:190724
AB Metallopeptides are provided for use in treatment of sexual dysfunction in mammals. The metallopeptides are agonists for at least one of melanocortin-3 or melanocortin-4 receptors. The metallopeptides are conformationally fixed on complexation of a metal ion-binding portion thereof with a metal ion. Also provided are metallopeptides that are antagonists for at least one of melanocortin-3 or melanocortin-4 receptors.
ST sexual dysfunction melanocortin **metallopeptide** agonist
IT Drug delivery systems
(buccal; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Drug delivery systems
(dermal; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Sexual behavior
(impotence; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Drug delivery systems
(inhalants; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Drug delivery systems
(injections, i.m.; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Drug delivery systems
(injections, i.v.; melanocortin **metallopeptides** for treatment of sexual dysfunction)

IT Drug delivery systems
(injections, s.c.; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Mammalia
Sexual behavior
(melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Pituitary hormone receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(melanocortin receptor, MC3, modulators; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Pituitary hormone receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(melanocortin receptor, MC4, modulators; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Protein motifs
(metal ion-binding; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Peptides, biological studies
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(metallo-; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Drug delivery systems
(nasal; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Drug delivery systems
(ophthalmic; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Drug delivery systems
(parenterals; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Conformation
(protein; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Drug delivery systems
(pulmonary; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Drug delivery systems
(sublingual; melanocortin **metallopeptides** for treatment of sexual dysfunction)
IT Drug delivery systems
(vaginal; melanocortin **metallopeptides** for treatment of sexual dysfunction)
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448904-27-6 449729-82-2 449729-83-3
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanocortin **metallopeptides** for treatment of sexual dysfunction)

IT 7440-15-5D, Rhenium, peptide complexes
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanocortin **metallopeptides** for treatment of sexual dysfunction)

L14 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **2001:137478** HCAPLUS
DN 134:188233
ED Entered STN: 25 Feb 2001
TI **Melanocortin metallopeptide** constructs, combinatorial libraries, and applications
IN **Sharma, Shubh D.; Shi, Yi-Qun; Yang, Wei; Cai, Hui-Zhi**
PA **Palatin Technologies, Inc., USA**
SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N033-53
ICS C07K005-12
CC 1-12 (Pharmacology)
Section cross-reference(s): 2, 34, 78
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013112	A1	20010222	WO 2000-US16396	20000615

PI W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,

CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1208377 A1 20020529 EP 2000-944681 20000615
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

PRAI US 1999-148994P P 19990812
WO 2000-US16396 W 20000615

OS MARPAT 134:188233

AB Metallopeptides and metallopeptide combinatorial libraries specific for melanocortin receptors are provided, for use in biol., pharmaceutical and related applications. The metallopeptides and combinatorial libraries are made of peptides, peptidomimetics and peptide-like constructs, in which the peptide, peptidomimetic or construct is conformationally fixed on complexation of a metal ion-binding portion thereof with a metal ion.

ST melanocortin **metallopeptide** combinatorial library; receptor melanocortin **metallopeptide** combinatorial library

IT Amino acids, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(3-mercapto; melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT Melanoma
(B16 cells; melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(complexes, with metals; melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT Pituitary hormone receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(melanocortin 1; melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT Pituitary hormone receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(melanocortin 4; melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT Peptide library
Protective groups
(melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT Pituitary hormone receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(melanocortin; melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT Peptidomimetics
(metal complexes; melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT Coordination compounds
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with peptidic compds.; melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

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327603-57-6P 327603-62-3P 327603-67-8P 327603-87-2P 327603-98-5P
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT 7440-15-5D, Rhenium, complexes with peptidic compds., biological studies
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(melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT 52-67-5, D-Penicillamine 52-90-4, L-Cysteine, biological studies
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RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

IT 60-92-4, Cyclic AMP
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(melanocortin **metallopeptide** constructs, combinatorial libraries, and applications)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Ghadiri; US 5200504 A 1993 HCAPLUS
(2) Rhodes; US 5277893 A 1994 HCAPLUS
(3) Sharma; US 5891418 A 1999 HCAPLUS
(4) Sharma; US 6027711 A 2000 HCAPLUS
(5) Zamora; US 5690905 A 1997 HCAPLUS

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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provided by InfoChem.

STRUCTURE FILE UPDATES:   20 JUN 2004  HIGHEST RN 696584-79-9
DICTIONARY FILE UPDATES:  20 JUN 2004  HIGHEST RN 696584-79-9

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
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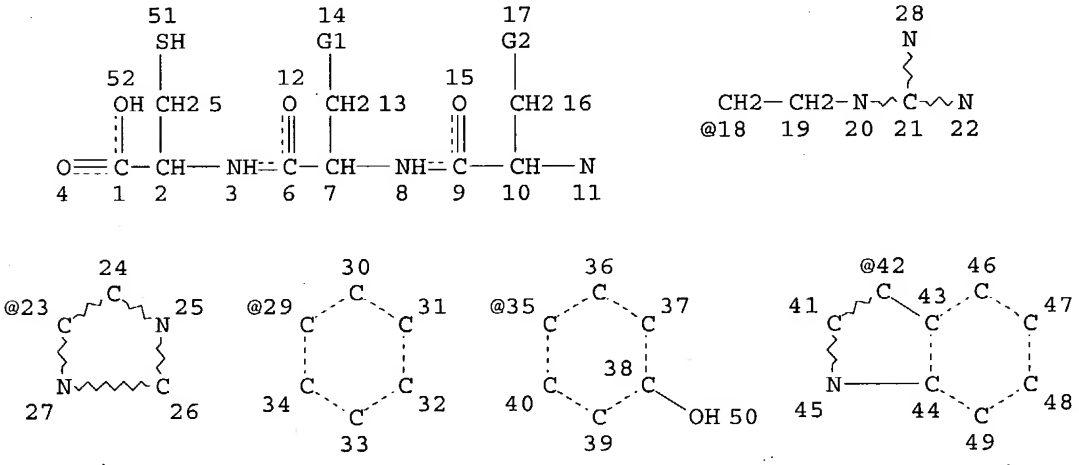


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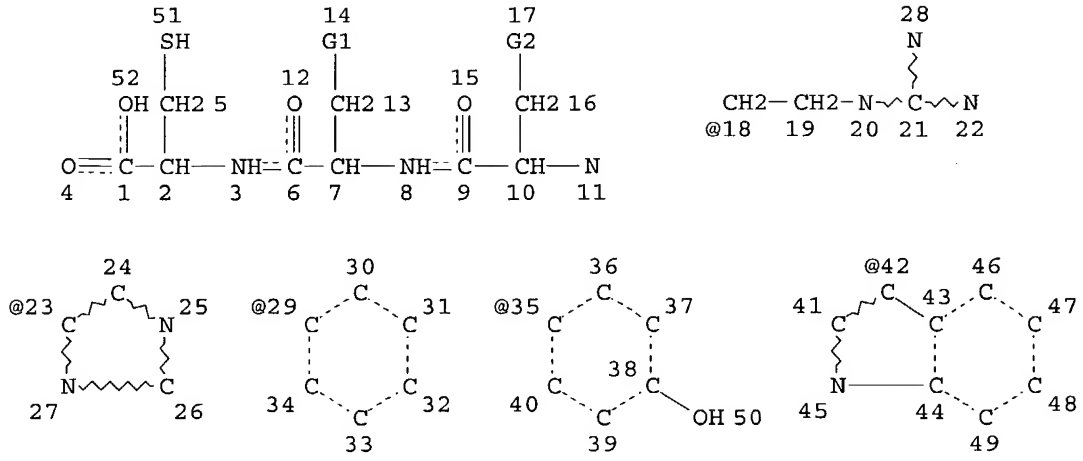

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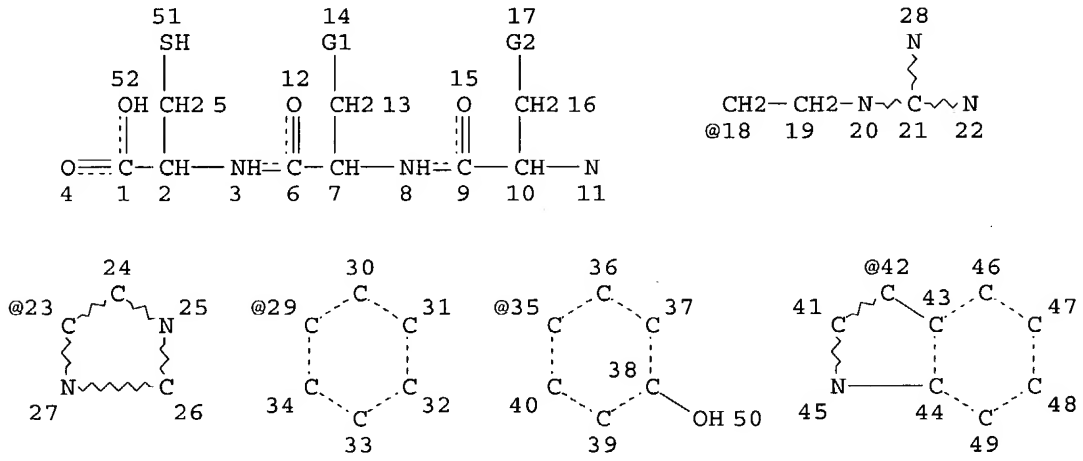

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RN 681451-64-9 REGISTRY
CN L-Cysteine, L-cysteinyl-L-glutaminyl-L-valyl-L-threonyl-L-alanyl-L-phenylalanyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 281: PN: US6723700 SEQID: 281 unclaimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 8

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US6723700 unclaimed SEQID 281

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RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF C38 H61 N9 O11 S2
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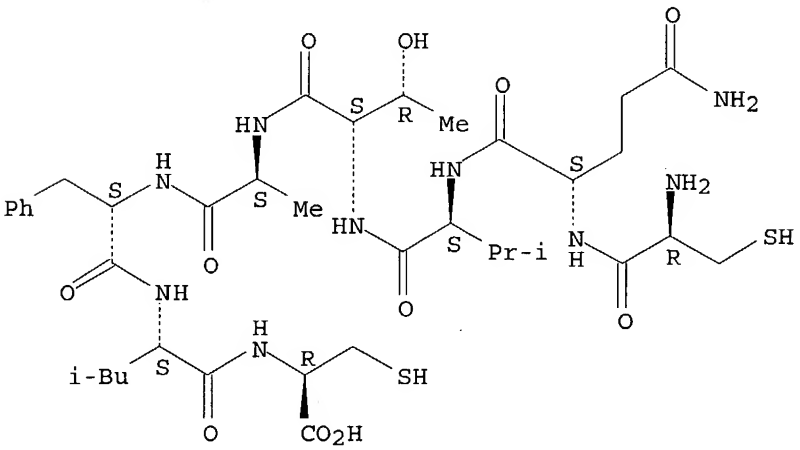
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

Absolute stereochemistry.



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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:350620

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RN 681451-61-6 REGISTRY
CN L-Cysteine, L-cysteinyl-L-valyl-L-threonyl-L-alanyl-L-phenylalanyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 278: PN: US6723700 SEQID: 278 unclaimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
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PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US6723700 unclaimed SEQID 278

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RELATED SEQUENCES AVAILABLE WITH SEQLINK
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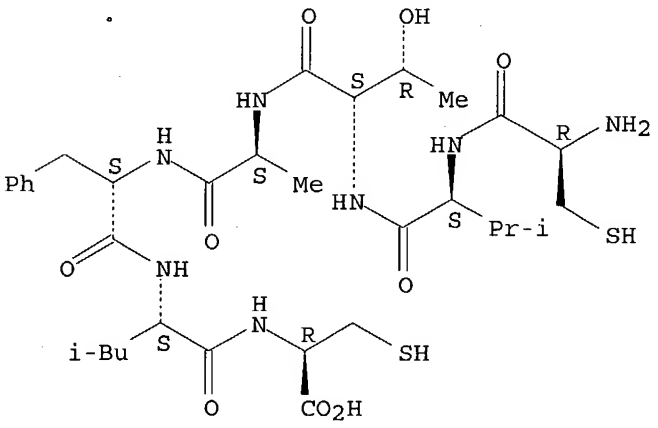
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

Absolute stereochemistry.



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REFERENCE 1: 140:350620

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RN 611239-89-5 REGISTRY
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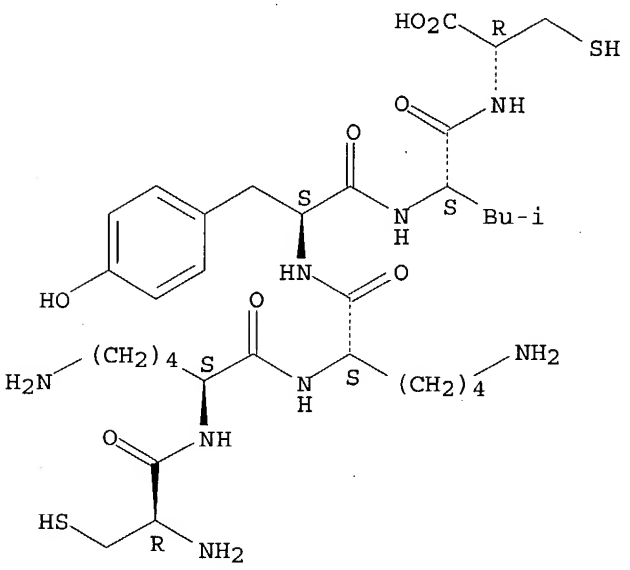
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 CKKYLC

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF C33 H56 N8 O8 S2
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.



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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:322283

L21 ANSWER 4 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 593277-89-5 REGISTRY
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OTHER NAMES:

CN 90: PN: WO03072542 SEQID: 95 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 8

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2003072542 claimed SEQID 95

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SR CA
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DT.CA CAplus document type: Patent
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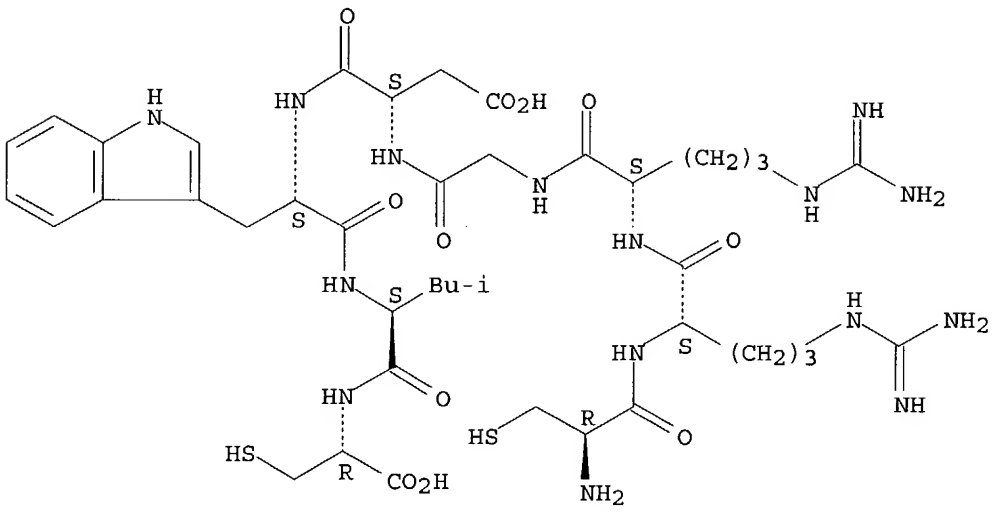
Absolute stereochemistry.



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REFERENCE 1: 139:235485

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OTHER NAMES:
CN 33: PN: US20030148449 SEQID: 32 unclaimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH

SQL **8**

PATENT ANNOTATIONS (PNTE):

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Not Given	US2003148449
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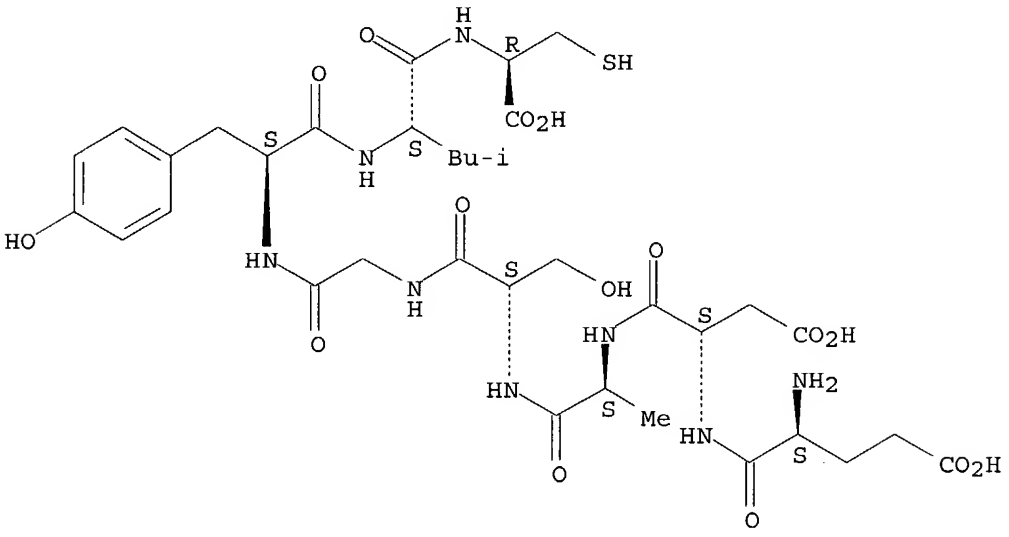
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

Absolute stereochemistry.



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REFERENCE 1: 139:175550

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OTHER NAMES:
CN 1: PN: WO02076489 SEQID: 7 claimed protein
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

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Not Given	WO2002076489 claimed SEQID 7

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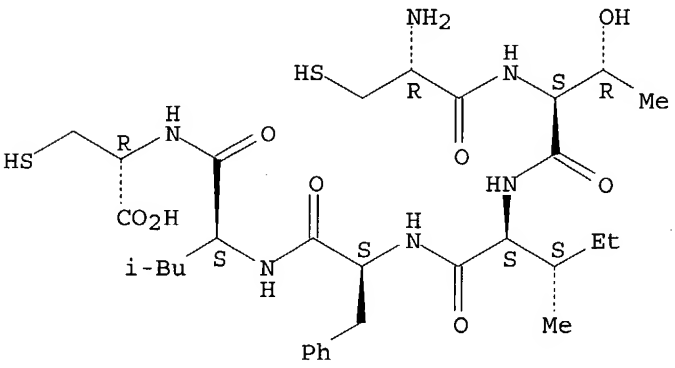
Absolute stereochemistry.



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REFERENCE 1: 137:299886

L21 ANSWER 7 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 404368-38-3 REGISTRY
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OTHER NAMES:
CN 108: PN: WO0220722 SEQID: 108 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
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PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2002020722 claimed SEQID 108

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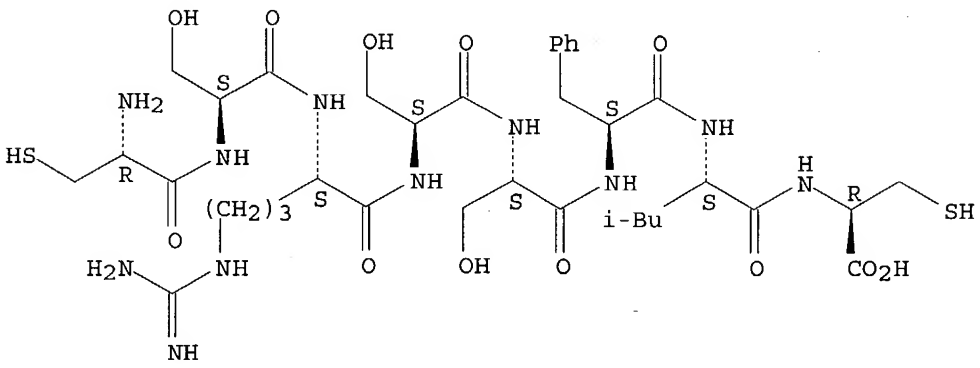
Absolute stereochemistry.



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REFERENCE 1: 136:242898

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RN 403983-92-6 REGISTRY
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FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

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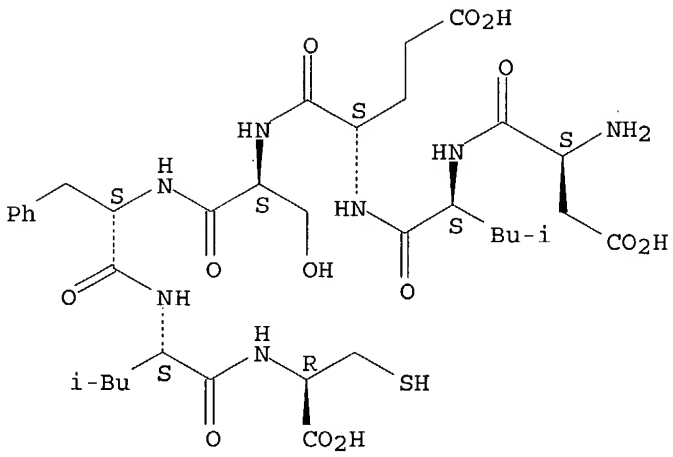
RL.NP Roles from non-patents: PRP (Properties)

Absolute stereochemistry.



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FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 8

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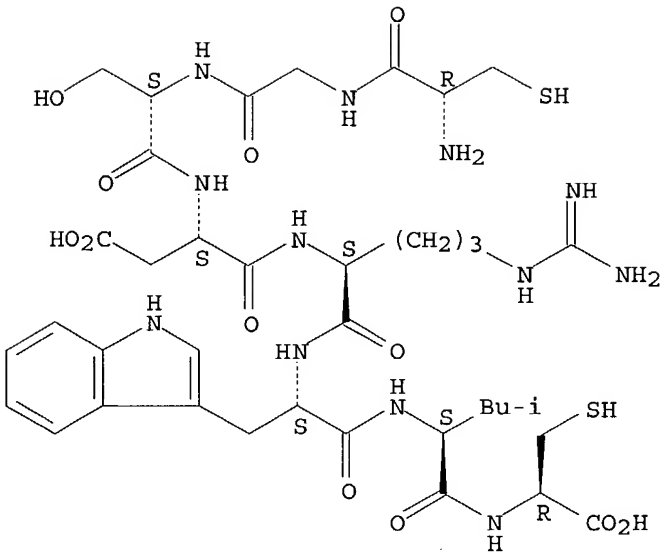
Absolute stereochemistry.



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CN 80: PN: WO0207676 SEQID: 129 claimed sequence
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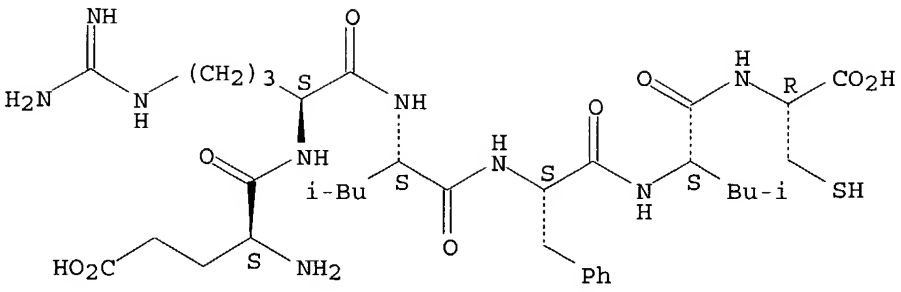
Absolute stereochemistry.



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REFERENCE 1: 136:151438

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OTHER NAMES:
CN 1322: PN: WO0131019 PAGE: 492 claimed protein
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 8

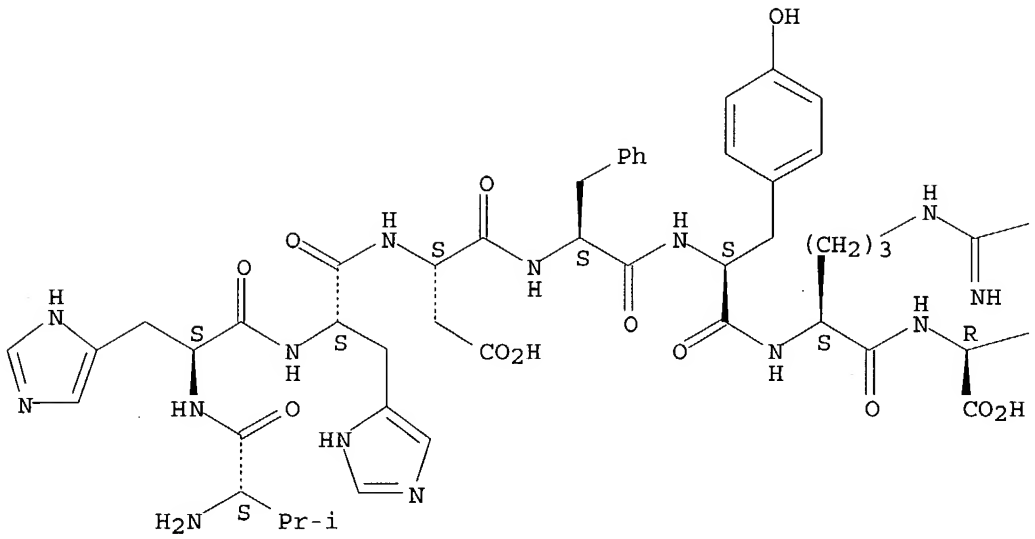
PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2001031019 claimed PAGE 492

SEQ 1 VHHDFYRC
MF C48 H65 N15 O12 S
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



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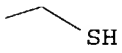


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:84685

L21 ANSWER 12 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 383413-54-5 REGISTRY
CN L-Cysteine, L-tryptophyl-L-arginyl-L-tyrosyl-L-arginyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

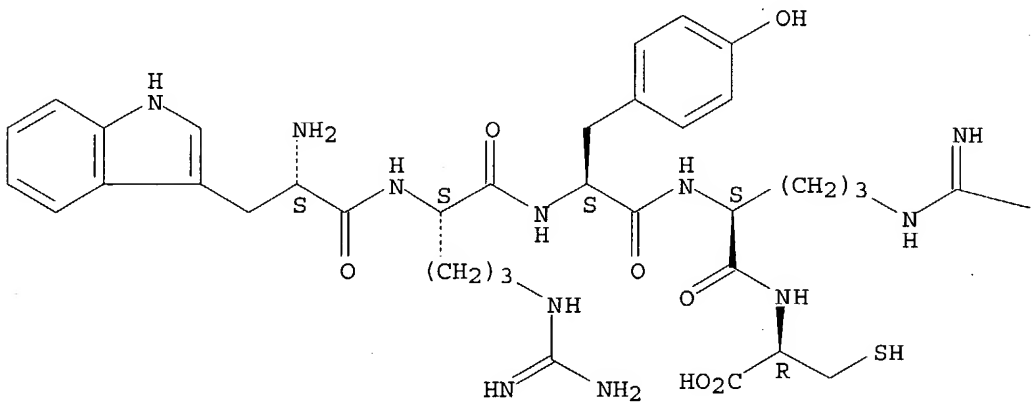
SEQ 1 WRYRC
MF C35 H50 N12 O7 S

Searched by Noble Jarrell 272-2556

SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:64158

L21 ANSWER 13 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 376597-97-6 REGISTRY
CN 1: PN: US6322780 SEQID: 17 unclaimed sequence (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

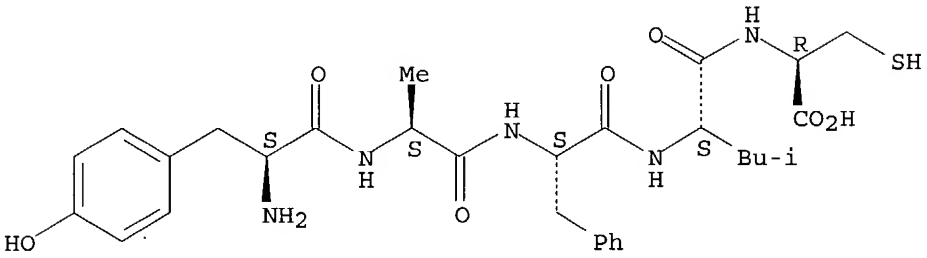
PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US6322780

|unclaimed
|SEQID 17

SEQ 1 YAFLC
MF C30 H41 N5 O7 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:4708

L21 ANSWER 14 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 363173-99-3 REGISTRY
CN L-Cysteine, L-phenylalanyl-L-prolyl-L-histidyl-L-prolylglycyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 18: PN: WO0170766 SEQID: 112 claimed sequence
CN Antigen pp65 [495-phenylalanine, 497-proline, 498-histidine, 499-proline, 500-glycine, 501-tryptophan, 502-leucine] (Cytomegalovirus)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 8

PATENT ANNOTATIONS (PNTE):

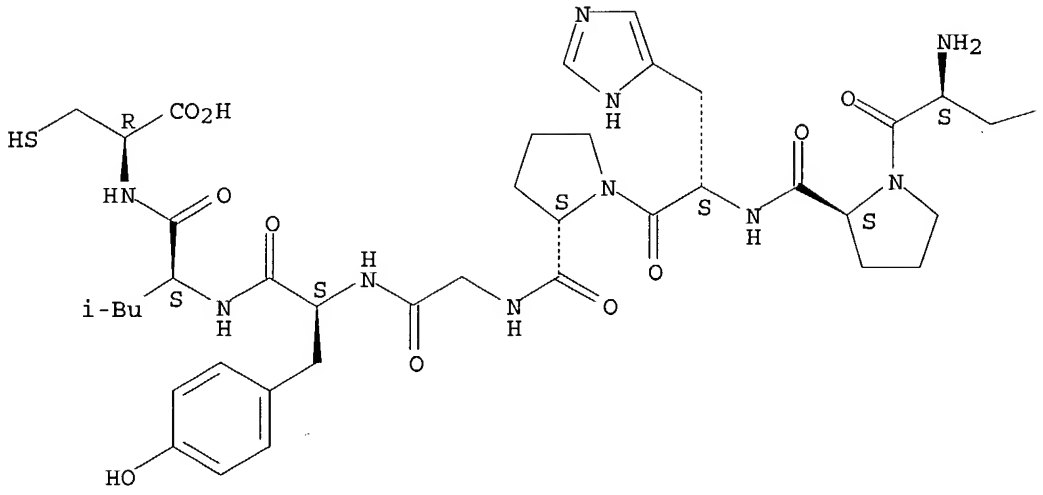
Sequence Source	Patent Reference
Not Given	WO2001070766 claimed SEQID 112

SEQ 1 FPHPGYLC
MF C45 H60 N10 O10 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP

(Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:267216

L21 ANSWER 15 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 336833-83-1 REGISTRY
CN L-Cysteine, glycyl-L-methionyl-L-α-aspartyl-L-lysyl-L-tyrosyl-L-arginyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 43: PN: WO0131019 PAGE: 403 claimed protein
CN 4482: PN: WO0131019 PAGE: 699 claimed protein
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

PATENT ANNOTATIONS (PNTE):

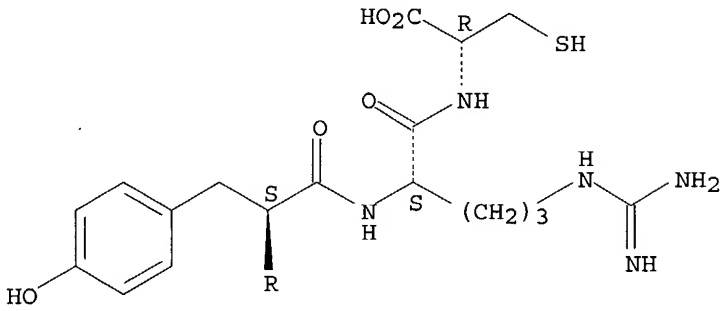
Sequence Source	Patent Reference
Not Given	WO2001031019 claimed PAGE 403

|WO2001031019
|claimed PAGE
|699

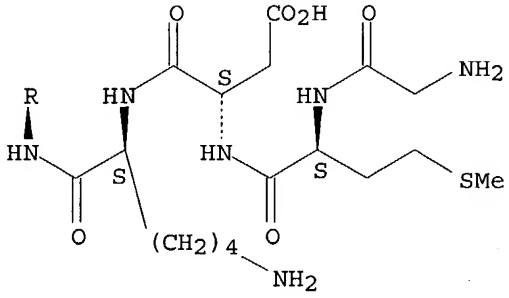
SEQ 1 GMDKYRC
MF C35 H57 N11 O11 S2
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:117375

REFERENCE 2: 136:4714

REFERENCE 3: 134:339530

L21 ANSWER 16 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 300346-05-8 REGISTRY
CN L-Cysteine, L-methionylglycyl-L-leucyl-L-tryptophyl-L-tryptophyl-L-arginyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 74: PN: WO0061620 SEQID: 74 claimed sequence
CN 786: PN: WO02077186 SEQID: 786 claimed

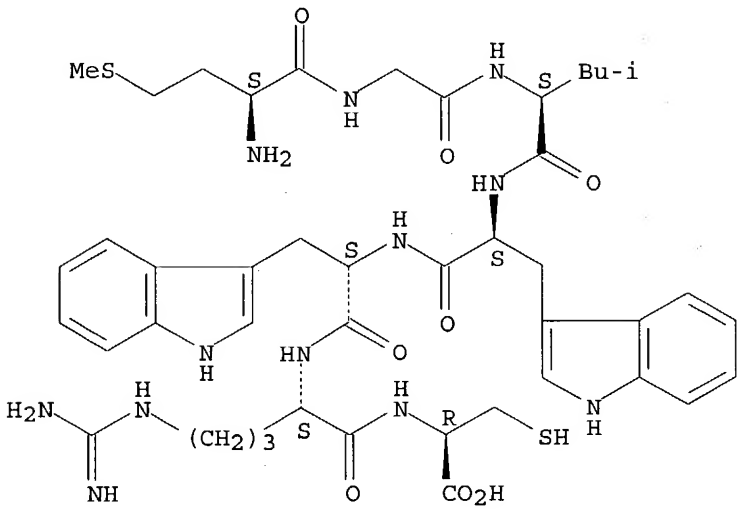
CN Immune system-associated secretory peptide (human clone HTEEF26)
CN Secretory peptide (human clone HTEEF26)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2000061620 claimed SEQID 74

SEQ 1 MGLWWRC
MF C44 H62 N12 O8 S2
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PRP (Properties); USES (Uses)

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:274139

REFERENCE 2: 133:291989

L21 ANSWER 17 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 294841-19-3 REGISTRY
CN L-Cysteine, L-glutaminyl-L-valyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 201: PN: WO0056755 SEQID: 176 unclaimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH

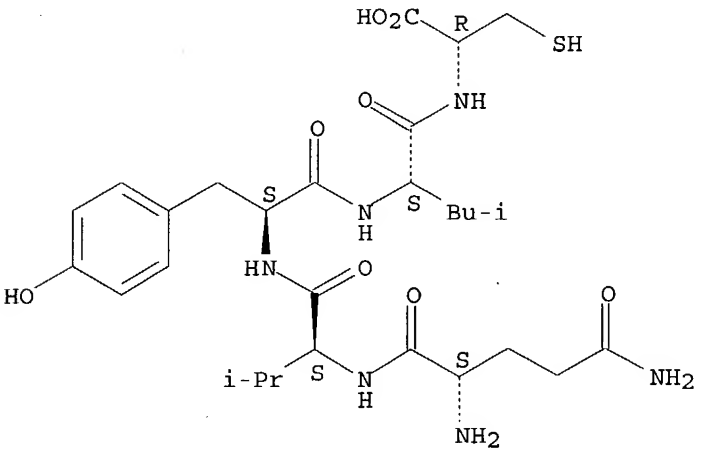
SQL 5

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2000056755
	unclaimed
	SEQID 176

SEQ 1 QVYLC
MF C28 H44 N6 O8 S
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

Absolute stereochemistry.



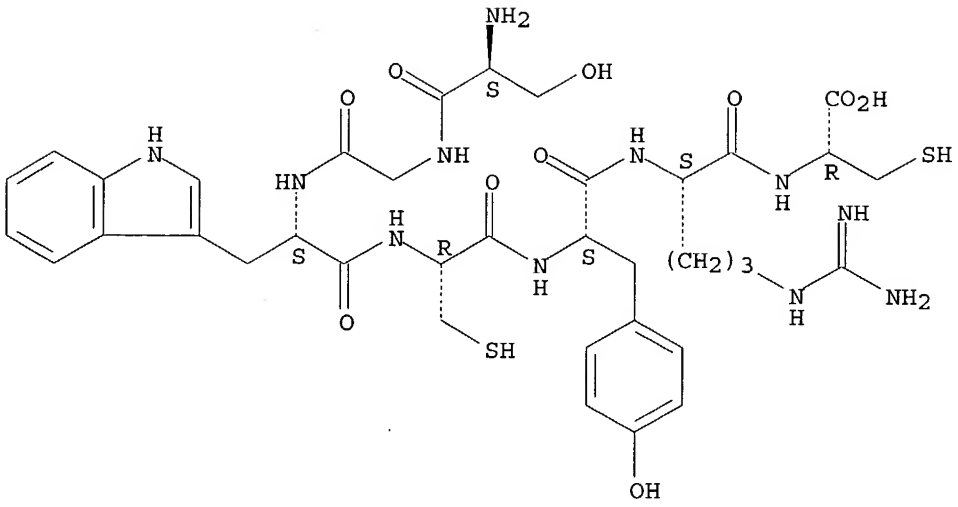
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:248084

L21 ANSWER 18 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 286378-76-5 REGISTRY
CN L-Cysteine, L-serylglycyl-L-tryptophyl-L-cysteinyl-L-tyrosyl-L-arginyl-(9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

SEQ 1 SGWCYRC
MF C37 H51 N11 O10 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PRP (Properties); USES (Uses)

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:140211

L21 ANSWER 19 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 253274-50-9 REGISTRY
CN L-Cysteine, L-cysteinyl-L-asparaginyl-L-glutaminylglycyl-L-seryl-L-phenylalanyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 24: PN: WO9967294 SEQID: 27 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 8

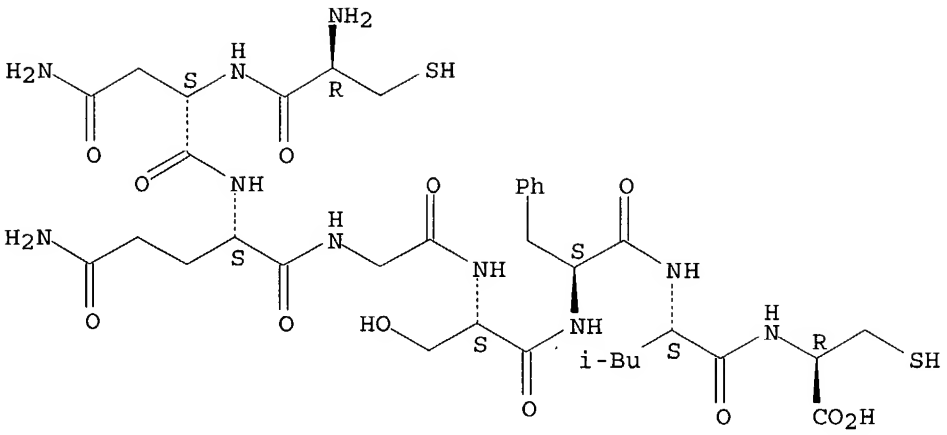
PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO9967294 claimed SEQID 27

SEQ 1 CNQGSFLC

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF C35 H54 N10 O12 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 132:77610

L21 ANSWER 20 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 248250-62-6 REGISTRY
CN L-Cysteine, L-threonyl-L-α-glutamyl-L-leucyl-L-α-glutamyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN PN: US5972680 SEQID: 11 unclaimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US5972680 unclaimed SEQID 11

SEQ 1 TELEYLC
MF C38 H59 N7 O14 S
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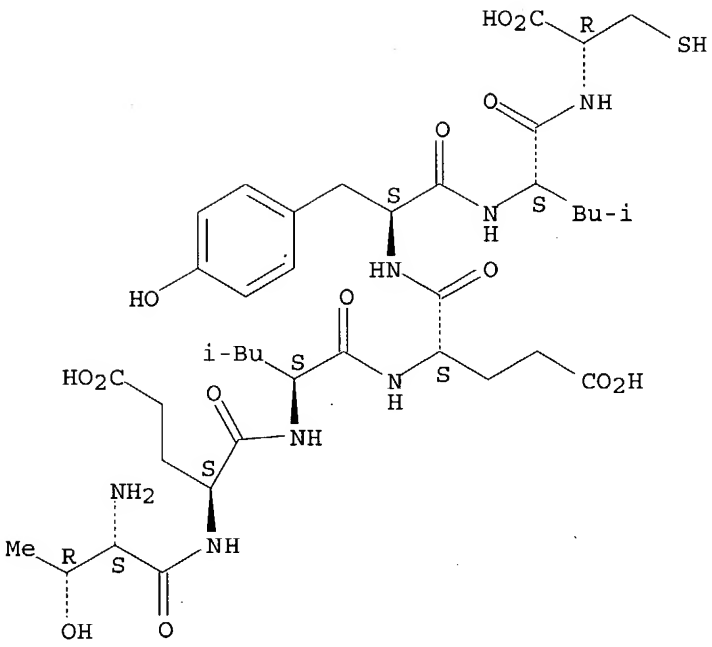
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:319661

L21 ANSWER 21 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 226568-50-9 REGISTRY
CN L-Cysteine, L-cysteinyl-L-isoleucyl-L-α-aspartyl-L-tyrosyl-L-leucyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 6
NTE modified (modifications unspecified)

type	------ location ------	description
modification	- -	undetermined modification

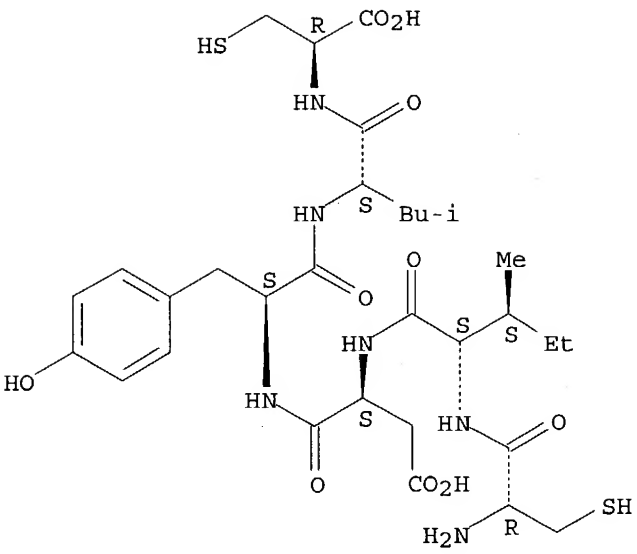
SEQ 1 CIDYLC

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF C31 H48 N6 O10 S2 . C2 H F3 O2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: RACT (Reactant or reagent)

CM 1

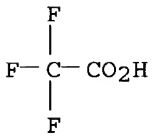
CRN 226568-49-6
CMF C31 H48 N6 O10 S2

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:19306

L21 ANSWER 22 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 226568-49-6 REGISTRY
CN L-Cysteine, L-cysteinyl-L-isoleucyl-L-α-aspartyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 6

SEQ 1 CIDYLC

RELATED SEQUENCES AVAILABLE WITH SEQLINK
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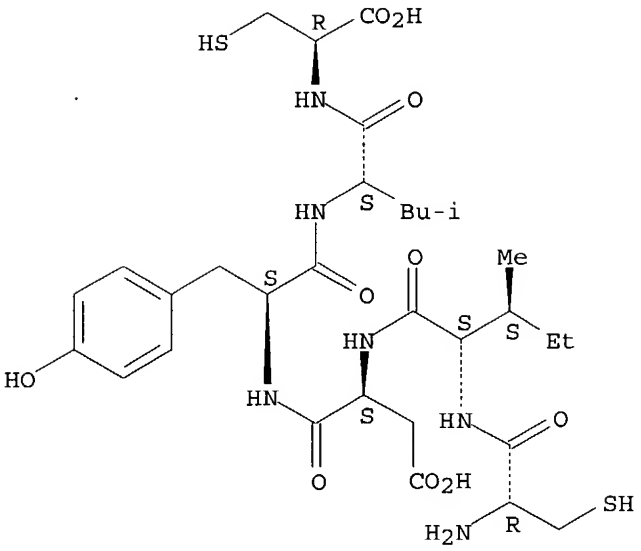
SR CA

Absolute stereochemistry.



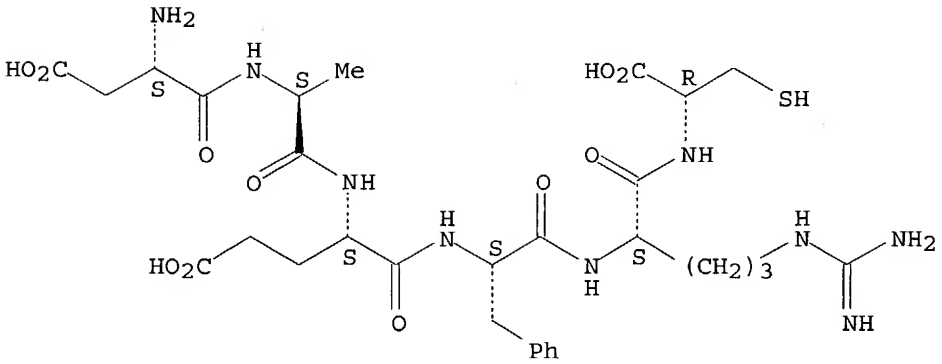
L21 ANSWER 23 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 214550-60-4 REGISTRY
CN L-Cysteine, L-α-aspartyl-L-alanyl-L-α-glutamyl-L-phenylalanyl-L-arginyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2: PN: US20030073655 SEQID: 2 unclaimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003073655 unclaimed SEQID 2

SEQ 1 DAEFRC
MF C30 H45 N9 O11 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence)

Absolute stereochemistry.



5 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:319696

REFERENCE 2: 134:28433

REFERENCE 3: 131:27965

REFERENCE 4: 131:17404

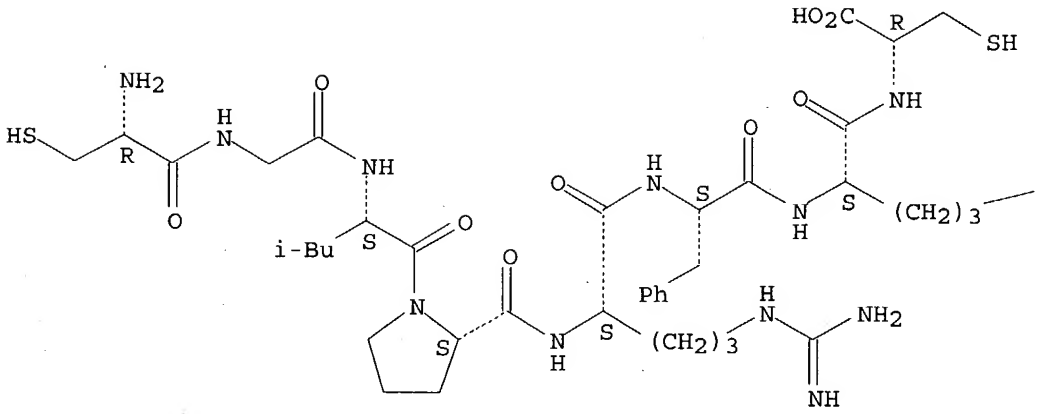
REFERENCE 5: 129:321146

L21 ANSWER 24 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 204320-71-8 REGISTRY
CN L-Cysteine, L-cysteinylglycyl-L-leucyl-L-prolyl-L-arginyl-L-phenylalanyl-L-arginyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **8**

SEQ 1 CGLPRFRC
MF C40 H66 N14 O9 S2
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



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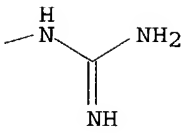


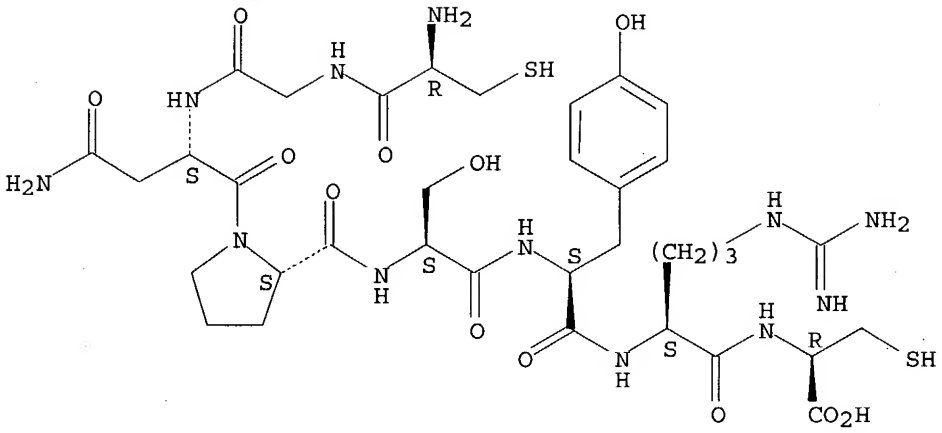
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 128:216368

L21 ANSWER 25 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 189023-76-5 REGISTRY
CN L-Cysteine, L-cysteinylglycyl-L-asparaginyl-L-prolyl-L-seryl-L-tyrosyl-L-arginyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 8

SEQ 1 CGNPSYRC
MF C35 H54 N12 O12 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:9082

REFERENCE 2: 126:272341

L21 ANSWER 26 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 167776-74-1 REGISTRY
CN L-Cysteine, L-cysteinyl-L-tryptophyl-L-α-aspartyl-L-α-aspartylglycyl-L-tryptophyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Cysteine, N-[N-[N-[N-[N-[N-(N-L-cysteinyl-L-tryptophyl)-L-α-aspartyl]-L-α-aspartyl]glycyl]-L-tryptophyl]-L-leucyl]-
OTHER NAMES:
CN 331: PN: WO0024782 SEQID: 455 claimed sequence
CN 495: PN: WO0183525 TABLE: 9 claimed protein
CN 8: PN: WO0181377 SEQID: 23 claimed protein
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 8

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	WO2000024782 claimed SEQID 455
	WO2001081377 claimed SEQID 23
	WO2001083525 claimed TABLE 9

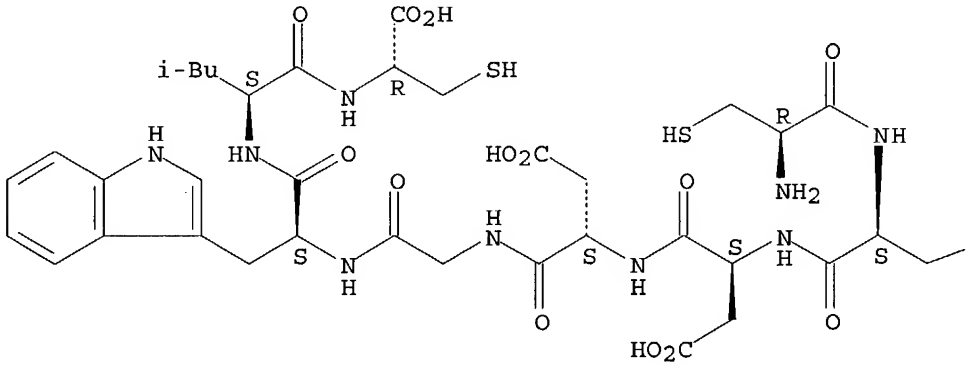
SEQ 1 CWDDGWLC

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C44 H56 N10 O13 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); PRP (Properties)

Absolute stereochemistry.

PAGE 1-A



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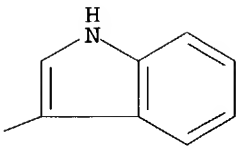


4 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:366701

REFERENCE 2: 135:352768

REFERENCE 3: 132:329919

REFERENCE 4: 123:191600

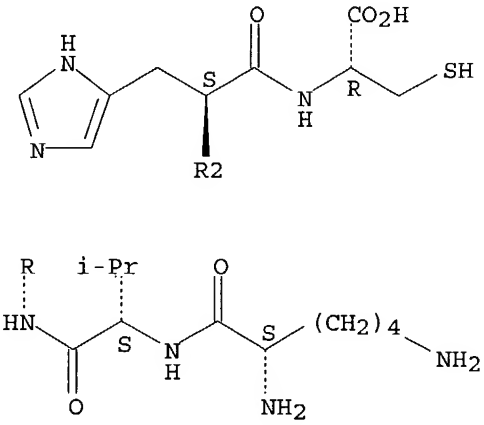
L21 ANSWER 27 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 150243-06-4 REGISTRY

CN L-Cysteine, N-[N-[N-[N2-(N-L-lysyl-L-valyl)-L-lysyl]-L-phenylalanyl]-L-histidyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 KVKFHC
MF C35 H56 N10 O7 S
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study)

Absolute stereochemistry.

PAGE 1-A



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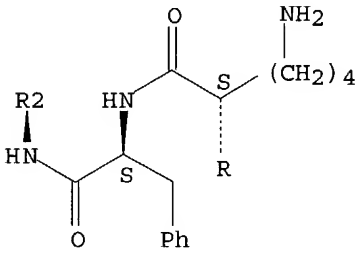


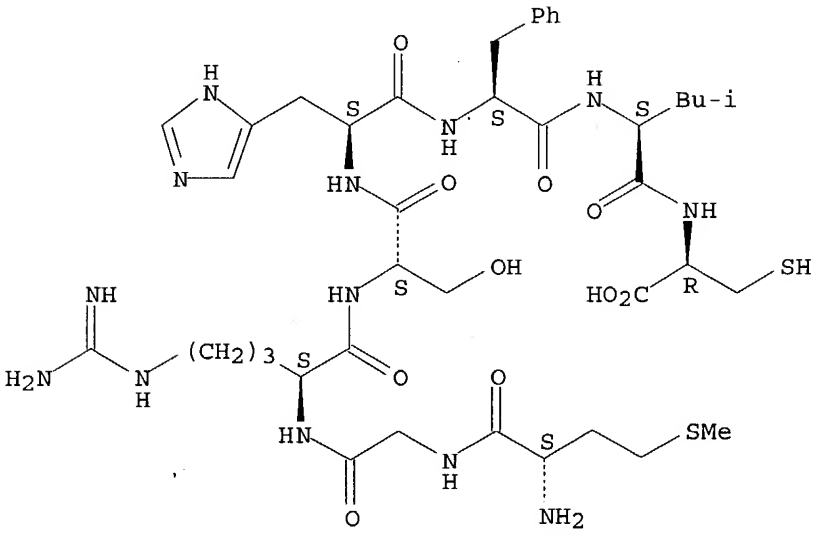
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:157882

L21 ANSWER 28 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 149420-20-2 REGISTRY
CN L-Cysteine, N-[N-[N-[N-[N-[N2-(N-L-methionylglycyl)-L-arginyl]-L-seryl]-L-histidyl]-L-phenylalanyl]-L-leucyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **8**

SEQ 1 MGRSHFLC
MF C40 H63 N13 O10 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence)

Absolute stereochemistry.



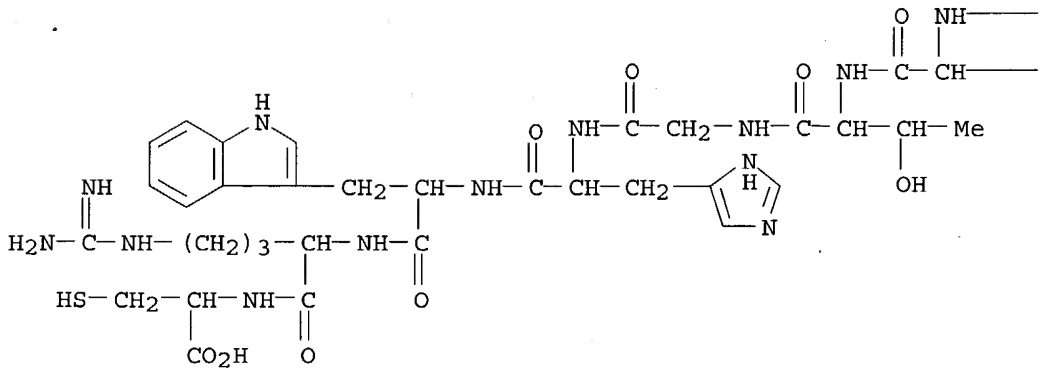
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:201329

L21 ANSWER 29 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 143756-07-4 REGISTRY
CN L-Cysteine, N-[N2-[N-[N-[N-[N-(N-L-cysteinyl-L-valyl)-L-threonyl]glycyl]-L-histidyl]-L-tryptophyl]-L-arginyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN HSP71 Carboxyl-terminal region fragment (Mycobacterium tuberculosis)
FS PROTEIN SEQUENCE
SQL 8

SEQ 1 CVTGHWRC
MF C40 H60 N14 O10 S2
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence)

PAGE 1-A



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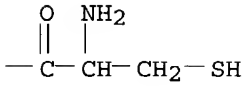


— Pr-i

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:201738

REFERENCE 2: 117:169125

L21 ANSWER 30 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN 110881-59-9 REGISTRY
CN L-Cysteine, L-tyrosyl-D-alanylglycyl-L-phenylalanyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Cysteine, N-[N-[N-[N-(N-L-tyrosyl-D-alanyl)glycyl]-L-phenylalanyl]-L-leucyl]-
OTHER NAMES:
CN 168: PN: US20030176421 PAGE: 54-55 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2003176421 claimed PAGE 54-55

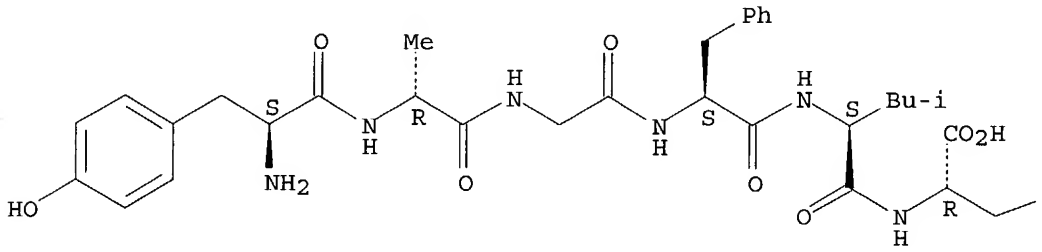
SEQ 1 YAGFLC

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C32 H44 N6 O8 S
SR CA
LC STN Files: BIOTECHNO, CA, CAPLUS, EMBASE, MEDLINE, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

SH

25 REFERENCES IN FILE CA (1907 TO DATE)
25 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:395537

REFERENCE 2: 139:255368

REFERENCE 3: 132:77836

REFERENCE 4: 127:229498

REFERENCE 5: 125:212481

REFERENCE 6: 124:155998

REFERENCE 7: 123:132693

REFERENCE 8: 122:306904

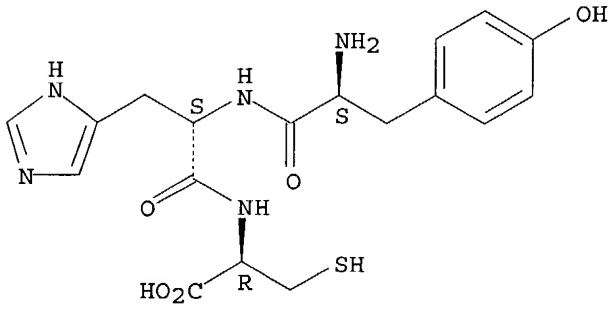
REFERENCE 9: 122:129480

REFERENCE 10: 122:46962

=> d ide l24 tot

L24 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 618445-89-9 REGISTRY
CN L-Cysteine, L-tyrosyl-L-histidyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 58: PN: WO03089595 SEQID: 58 unclaimed sequence
FS STEREOSEARCH
MF C18 H23 N5 O5 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PRP (Properties)

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d his

(FILE 'HOME' ENTERED AT 08:49:54 ON 21 JUN 2004)

FILE 'HCAPLUS' ENTERED AT 08:50:00 ON 21 JUN 2004

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		E SHARMA SHUBH/AU
L2	53	E3-5
		E SHI Y/AU
		E SHI YI-QUN/AU
		E SHI YI QUN/AU
L3	11	E3
		E SHI Y Q/AU
L4	14	E3
		E YANG W/AU
L5	915	E3-29
		E YANG WEI/AU
L6	1001	E3-87
		E CAI H Z/AU
L7	1	E3
		E CAI HUI/AU
L8	91	E3,E16
		E BLOOD C/AU
L9	13	E3,E9-10
		E SHADIACK A/AU
L10	21	E3-7
L11	138	PALATIN?/CS,PA
L12	17	L1-11 AND MELANOCORTIN/TI

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L14             2 E1-4 AND L13

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L28            47 L25 AND (PRY<=1999 OR AY<=1999 OR PY<=1999 OR PRD<19990813 OR A

=> b hcap
FILE 'HCAPLUS' ENTERED AT 10:31:24 ON 21 JUN 2004
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FILE COVERS 1907 - 21 Jun 2004  VOL 140 ISS 26
FILE LAST UPDATED: 20 Jun 2004  (20040620/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d bib abs hitrn retable l28 tot

L28  ANSWER 1 OF 47  HCAPLUS  COPYRIGHT 2004 ACS on STN
AN   2004:327186  HCAPLUS
DN   140:350620
TI   Claudin cell adhesion recognition sequence-based agents and methods for
     modulating claudin-mediated functions
IN   Blaschuk, Orest W.; Symonds, James Matthew; Gour, Barbara J.
PA   Adherex Technologies, Inc., Can.
SO   U.S., 127 pp., Cont.-in-part of U.S. Ser. No. 185,908.
     CODEN: USXXAM
```

DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6723700	B1	20040420	US 1999-282029	19990330 <--
	US 2002193294	A1	20021219	US 1998-185908	19981103 <--
	WO 2000026360	A1	20000511	WO 1999-CA1029	19991103 <--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1127119	A1	20010829	EP 1999-953468	19991103 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2003524384	T2	20030819	JP 2000-579732	19991103 <--
PRAI	US 1998-185908	A2	19981103 <--		
	US 1999-282029	A	19990330 <--		
	WO 1999-CA1029	W	19991103 <--		

OS MARPAT 140:350620

AB The invention provides methods for using modulating agents to enhance or inhibit claudin-mediated cell adhesion in a variety of in vivo and in vitro contexts. Within certain embodiments, the modulating agents may be used to increase blood/brain barrier permeability. The modulating agents comprise at least one claudin cell adhesion recognition sequence or an antibody or fragment thereof that specifically binds the claudin cell adhesion recognition sequence. Modulating agents may addnl. comprise one or more cell adhesion recognition sequence recognized by other adhesion mols. Such modulating agents may, but need not, be linked to a targeting agent, drug and/or support material.

IT **681451-61-6 681451-64-9**
RL: PRP (Properties)
(unclaimed sequence; claudin cell adhesion recognition sequence-based agents and methods for modulating claudin-mediated functions)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Aberle	1997	16	3797	The EMBO Journal	HCAPLUS
Anon	1995			WO 9506122	HCAPLUS
Anon	1997			WO 9726001	HCAPLUS
Anon	2000		5	USPTO Search-US-09-2	
Anon	2000		2	USPTO Search-US-09-2	
Briehl	1991	5	1381	Molecular Endocrinol	HCAPLUS
Chen	1998	78	353	Lab Invest	HCAPLUS
Furuse	1998	141	1539	The Journal of Cell	HCAPLUS
Furuse	1998	143	391	The Journal of Cell	HCAPLUS
Hanna	1991	266	11307	The Journal of Biolo	
Katahira	1997	272	26652	The Journal of Biolo	HCAPLUS
Katahira	1997	136	1239	The Journal of Cell	HCAPLUS
Sonoda	1999	147	195	The Journal of Cell	

L28 ANSWER 2 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:737369 HCAPLUS
DN 139:255368

TI Prokinetic agents for treating gastric hypomotility and related disorders
IN Watson, John W.; Andrews, Paul L. R.; Woods, Anthony J.
PA USA
SO U.S. Pat. Appl. Publ., 57 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2003176421	A1	20030918	US 1999-476253	19991230 <--
PRAI US 1999-476253		19991230 <--		

OS MARPAT 139:255368
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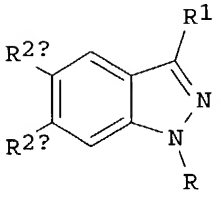

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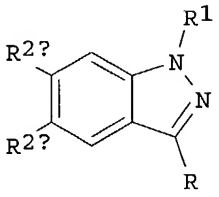

II

AB Stasis is treated or prevented in all or any part or parts of the stomach of a patient, especially a human patient, in need of such treatment, where said stasis results from hypomotility in the stomach, particularly gastric hypomotility with delayed emptying of the liquid and/or solid contents of the stomach. Gastric or gastrointestinal disorders are also treated which are characterized by one or more symptoms selected from pain, nausea, vomiting, heartburn, postprandial discomfort, indigestion and gastroesophageal reflux. Such treatment or prevention is achieved by administering to the patient a therapeutically effective amount of an inhibitor of phosphodiesterase-4 (PDE4), including isoenzyme subtypes thereof, sufficient to treat or prevent such hypomotility or gastric or gastrointestinal disorder in said patient. The PDE4 inhibitor comprises I or II [preferrably R = cyclopentyl or cyclohexyl; R1 = (C1-C2) alkyl; one of R2a and R2b = H and the other = Q; dashed line = single bond; m = 0, R113 and R114 are cis to each other; R113 = CN, R115 = H, R114 = carboxy, -CH2OH, -CH2C(=O)NH2]. Pharmaceutical compns. are also described which are useful for carrying out the above-mentioned methods of treatment and prevention, and which are also useful in the treatment of a gastric or gastrointestinal disorder in a patient which comprises with respect to said patient, (i) a sign or concomitant of diabetic neuropathy, anorexia nervosa, achlorhydria, gastrointestinal surgery, post-surgical recovery in the period of emergence from general anesthesia; or the administration of morphine and morphine-like opioids; (ii) a secondary aspect of a primary disease or disorder in said patient which is organic, wherein said disease or disorder involves particularly a gastroenteric or gastroesophageal organ or tissue, or an organ or tissue of the central nervous system of said patient; or (iii) an adverse side effect of a different therapeutic agent administered to said patient in the course of treating another unrelated disease or disorder in said patient.

IT **110881-59-9**
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as auxiliary therapeutic agent; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related

disorders)

L28 ANSWER 3 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:300608 HCAPLUS
DN 138:319696
TI Antibodies specific to amyloid β peptide for treating amyloid deposition-related diseases such as Alzheimer's disease
IN Chain, Daniel G.
PA Israel
SO U.S. Pat. Appl. Publ., 28 pp., Cont.-in-part of U.S. Ser. No. 402,820.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003073655	A1	20030417	US 2002-84380	20020228 <--
	WO 9844955	A1	19981015	WO 1998-US6900	19980409 <--
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	WO 2003074081	A1	20030912	WO 2002-US31590	20021021
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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PRAI	US 1997-41850P	P	19970409 <--		
	WO 1998-US6900	W	19980409 <--		
	US 1999-402820	A2	19991012 <--		
	US 2002-84380	A	20020228		

AB The invention relates to methods of treating a subject having Alzheimer's Disease, comprising the step of administering an antibody mol. which is targeted to β amyloid peptide or to fragment thereof. In another embodiment the invention relates to methods of treating a disease or a disorder, characterized by amyloid beta deposition. In another embodiment, the invention relates to an antibody mol., which is free end-specific for the N-terminus or the C-terminus of an amyloid β peptide and to a pharmaceutical composition thereof. In another embodiment, the invention relates to an antibody mol., which is targeted to the free C or N-terminus of a N-and/or C-terminus truncated amyloid β peptide fragment. The antibodies are monoclonal antibodies, humanized antibodies, chimeric antibodies, bispecific antibodies, artificial antibodies, scFv , F(ab) or fragments.

IT **214550-60-4**
RL: PRP (Properties)
(unclaimed sequence; antibodies specific to amyloid β peptide for treating amyloid deposition-related diseases such as Alzheimer's disease)

L28 ANSWER 4 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:861496 HCAPLUS
DN 136:4708
TI Marek's disease virus vaccines
IN Lee, Lucy F.; Nazerian, Keyvan; Witter, Richard L.; Wu, Ping; Yanagida, Noboru; Yoshida, Shigeto
PA The United States of America as Represented by the Secretary of Agriculture, USA; Nippon Zeon Co., Ltd.
SO U.S., 47 pp., Cont.-in-part of U.S. Ser. No. 499,474.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6322780	B1	20011127	US 1996-709731	19960909 <--
	WO 9703187	A2	19970130	WO 1996-US11360	19960705 <--
	WO 9703187	A3	19970320		
	W: AU, CA, CN, JP, KR, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 2002085999	A1	20020704	US 2001-920848	20010803 <--
PRAI	US 1995-499474	B2	19950707 <--		
	WO 1996-US11360	A1	19960705 <--		
	US 1996-709731	A3	19960909 <--		

AB The authors disclose the sequence characterization of the UL32 gene encoding the gp82 polypeptide of Marek's disease virus. Also disclosed are recombinant viruses which are useful as vaccines for protecting against Marek's Disease. In one example, a recombinant fowlpox virus vector containing genes encoding Marek's disease virus glycoprotein B and glycoprotein gp82 under the control of a poxvirus promoter was shown to elicit an enhanced protective immune response in antibody-neg. 1-day-old chicks.

IT **376597-97-6**
RL: PRP (Properties)
(unclaimed sequence; marek's disease virus vaccines)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1990			WO 9002803	
Blacklaws	1990	177	727	Virology	HCAPLUS
Boyle	1993	71	391	Immunology and Cell	HCAPLUS
Boyle	1988	10	343	Virus Research	HCAPLUS
Chang	1993	67	6348	Journal of Virology	HCAPLUS
Chang	1996	70	3938	Journal of Virology	HCAPLUS
Churchill	1969	221	744	Nature	MEDLINE
Coussens	1988	62	2373	J of Virology	HCAPLUS
Cui	1991	65	6509	J of Virology	HCAPLUS
Igarashi	1987	157	351	Virology	HCAPLUS
Nazerian	1994			US 5369025	HCAPLUS
Nazerian	1995			US 5403582	HCAPLUS
Nazerian	1992	66	1409	Journal of Virology	HCAPLUS
Ogawa	1990	8	486	Vaccine	HCAPLUS
Okazaki	1970	14	413	Avian Dis	MEDLINE
Reddy	1996	16	469	Vaccine	
Rispens	1972	16	108	Avian Disease	MEDLINE
Ross	1989	70	1789	Journal of Gen Virol	HCAPLUS
Ross	1991	72	939	Journal of General V	HCAPLUS
Schat	1978	60	1075	J Nat Cancer Inst	MEDLINE

Whittaker	1992	73	2933	Journal of General V	HCAPLUS
Witter	1979	8	145	Avian Pathology	
Witter	1992	21	601	Avian Pathology	
Yanagida	1992	66	1402	Journal of Virology	HCAPLUS
Zelnick	1995	39	53	Acta virologica	

L28 ANSWER 5 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:816705 HCAPLUS
DN 135:366701
TI Fc-domain-modified peptides as therapeutic agents
IN Feige, Ulrich; Liu, Chuan-Fa; Cheetham, Janet C.; Boone, Thomas Charles; Gudas, Jean Marie
PA Amgen Inc., USA
SO PCT Int. Appl., 176 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001083525	A2	20011108	WO 2001-US14310	20010502
	WO 2001083525	A3	20020718		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1278778	A2	20030129	EP 2001-932951	20010502
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003533187	T2	20031111	JP 2001-580949	20010502
	US 2004077022	A1	20040422	US 2003-666696	20030919 <--
PRAI	US 2000-563286	A	20000503		
	US 1998-105371P	P	19981023 <--		
	US 1999-428082	A2	19991022 <--		
	WO 2001-US14310	W	20010502		

AB The present invention concerns fusion of Fc domains with biol. active peptides and a process for preparing pharmaceutical agents using biol. active peptides. In this invention, pharmacol. active compds. are prepared by a process comprising: a) selecting at least one peptide that modulates the activity of a protein of interest; and b) preparing a pharmacol. agent comprising an Fc domain covalently linked to at least one amino acid of the selected peptide. Linkage to the vehicle increases the half-life of the peptide, which otherwise would be quickly degraded in vivo. The preferred vehicle is an Fc domain. The peptide can be selected, for example, by phage display, E.coli display, ribosome display, RNA-peptide screening, yeast-based screening, chemical-peptide screening, rational design, or protein structural anal.
IT **167776-74-1**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Fc-domain-modified peptides as therapeutic agents)

L28 ANSWER 6 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:861520 HCAPLUS
DN 134:28433

TI Prevention and treatment of amyloidogenic disease
IN Schenk, Dale B.; Bard, Frederique; Vasquez, Nicki J.; Yednock, Ted
PA Neuralab Limited, Bermuda
SO PCT Int. Appl., 143 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2000072880	A2	20001207	WO 2000-US14810	20000526	<--
	WO 2000072880	A3	20010531			
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
	BR 2000011000	A	20020219	BR 2000-11000	20000526	<--
	EP 1185298	A2	20020313	EP 2000-937919	20000526	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
	TR 200103447	T2	20020422	TR 2001-20010344720000526		<--
	GB 2368794	A1	20020515	GB 2001-30969	20000526	<--
	DE 10084643	T	20020711	DE 2000-10084643	20000526	<--
	TR 200202231	T2	20021121	TR 2002-20020223120000526		<--
	EE 200100626	A	20030217	EE 2001-626	20000526	<--
	JP 2003517461	T2	20030527	JP 2001-511319	20000526	<--
	US 6710226	B1	20040323	US 2000-723384	20001127	<--
	US 6743427	B1	20040601	US 2000-724961	20001128	<--
	US 6750324	B1	20040615	US 2000-724552	20001128	<--
	ZA 2001009487	A	20030217	ZA 2001-9487	20011116	<--
	NO 2001005773	A	20020125	NO 2001-5773	20011127	<--
	BG 106241	A	20020830	BG 2001-106241	20011219	<--
PRAI	US 1999-322289	A2	19990528 <--			
	US 1997-67740P	P	19971202 <--			
	US 1998-80970P	P	19980407 <--			
	US 1998-201430	A2	19981130 <--			
	US 2000-580015	A1	20000526			
	US 2000-580018	A1	20000526			
	WO 2000-US14810	W	20000526			

AB The invention provides improved agents and methods for treatment of diseases associated with amyloid deposits of Aβ in the brain of a patient. Such methods entail administering agents that induce a beneficial immunogenic response against the amyloid deposit. The methods are useful for prophylactic and therapeutic treatment of Alzheimer's disease. Preferred agents including N-terminal fragments of Aβ and antibodies binding to the same.
IT **214550-60-4**
RL: PRP (Properties)
(Unclaimed; prevention and treatment of amyloidogenic disease)

L28 ANSWER 7 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:742128 HCAPLUS
DN 133:291989
TI Cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins

IN Rosen, Craig A.; Ruben, Steven M.; Komatsoulis, George
PA Human Genome Sciences, Inc., USA
SO PCT Int. Appl., 540 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000061620	A1	20001019	WO 2000-US9069	20000406 <--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1173477	A1	20020123	EP 2000-920165	20000406 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2003501009	T2	20030114	JP 2000-611561	20000406 <--
PRAI	US 1999-128702P	P	19990409 <--		
	US 2000-177049P	P	20000120		
	WO 2000-US9069	W	20000406		

AB The present invention relates to 49 novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Tissue distribution, sequence homologies, and preferred epitope sites are provided for the secreted proteins, as well as chromosomal mapping of some of the genes. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins in bacterial, insect, and mammalian cells. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins. High-throughput screening assays are also provided for various putative activities of the secreted proteins.

IT **300346-05-8P**
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Genetics Institute Inc	1998			WO 9832853	HCAPLUS
Hillier	1997			GenBank Accession no	
Human Genome Sciences I	1998			WO 9839448	HCAPLUS
Watson	1994		63	Recombinant DNA Seco	

L28 ANSWER 8 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:688255 HCAPLUS
DN 133:248084
TI Cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins
IN Rosen, Craig A.; Ruben, Steven M.; Komatsoulis, George
PA Human Genome Sciences, Inc., USA

SO PCT Int. Appl., 419 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2000056755	A1	20000928	WO 2000-US6830	20000316	<--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
	EP 1169333	A1	20020109	EP 2000-914974	20000316	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
	JP 2002539778	T2	20021126	JP 2000-606616	20000316	<--
PRAI	US 1999-125361P	P	19990319	<--		
	US 1999-169910P	P	19991210	<--		
	WO 2000-US6830	W	20000316			

AB The present invention relates to 49 novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Tissue distribution, sequence homologies, and preferred epitope sites are provided for the secreted proteins, as well as chromosomal mapping of some of the genes. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins in bacterial, insect, and mammalian cells. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins. High-throughput screening assays are also provided for various putative activities of the secreted proteins.

IT **294841-19-3**
RL: PRP (Properties)
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 49 human secreted proteins)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Akeno, N	1997	138	2233	Endocrinology	HCAPLUS
Itoh, S	1995	1264	26	Biochim et Biophys A	HCAPLUS
Ohyama, Y	1991	278	195	FEBS Letters	HCAPLUS
Ohyama, Y	1993	32	76	Structural character	HCAPLUS

L28 ANSWER 9 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:513459 HCAPLUS
DN 133:140211
TI Homing pro-apoptotic conjugates for antitumor application
IN Ellerby, H. Michael; Bredesen, Dale E.; Pasqualini, Renata; Ruoslahti, Erkki I.
PA Burnham Institute, USA
SO PCT Int. Appl., 118 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000042973	A2	20000727	WO 2000-US1602	20000121 <--
	WO 2000042973	A3	20000928		
	W: AU, CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2359633	AA	20000727	CA 2000-2359633	20000121 <--
	EP 1150701	A2	20011107	EP 2000-911617	20000121 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002535258	T2	20021022	JP 2000-594432	20000121 <--
PRAI	US 1999-235902	A	19990122 <--		
	WO 2000-US1602	W	20000121		

AB The present invention provides a homing pro-apoptotic conjugate, which includes a tumor-homing mol. that selectively homes to a selected mammalian cell type or tissue linked to an antimicrobial peptide, where the conjugate is selectively internalized by the mammalian cell type or tissue and exhibits high toxicity thereto, and where the antimicrobial peptide has low mammalian cell toxicity when not linked to the tumor-homing mol. A homing pro-apoptotic conjugate of the invention can be, for example, D-amino acid-containing sequences CNGRC-GG-D(KLAKLAK)2 or ACDCRGDCFC-GG-D(KLAKLAK)2. The conjugates of the invention are useful, for example, for treating a patient with a tumor having angiogenic vasculature.

IT **286378-76-5P**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(homing pro-apoptotic conjugates for antitumor application)

L28 ANSWER 10 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:362568 HCAPLUS
DN 133:9082
TI Method of identifying antitumor peptide or peptidomimetic molecules that home to a selected organ in vivo
IN Ruoslahti, Erkki; Pasqualini, Renata
PA The Burnham Institute, USA
SO U.S., 20 pp., Cont.-in-part of U.S. Ser. No. 813,273.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6068829	A	20000530	US 1997-862855	19970623 <--
	US 5622699	A	19970422	US 1995-526710	19950911 <--
	EP 987275	A2	20000322	EP 1999-250432	19960910 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2003155296	A2	20030527	JP 2002-245801	19960910 <--
	US 6296832	B1	20011002	US 1999-226985	19990108 <--
	US 6306365	B1	20011023	US 1999-227906	19990108 <--
	US 2004071689	A1	20040415	US 2001-922227	20010802 <--
PRAI	US 1995-526710	A2	19950911 <--		
	US 1997-813273	A2	19970310 <--		
	US 1995-526708	A	19950911 <--		
	EP 1996-250195	A3	19960910 <--		
	JP 1997-512087	A3	19960910 <--		

US 1997-862855 A1 19970623 <--
US 1999-227906 A1 19990108 <--

AB The present invention provides methods for in vivo panning of a library to identify antitumor peptides or peptidomimetic mols. that specifically home to a selected organ. The method involves (1) administering to a subject a library of diverse peptide or peptidomimetic mols., wherein each of said diverse mols. is linked to a tag that facilitates recovery of said peptide or peptidomimetic mols., (2) collecting a sample of the selected organ or tissue, and (3) recovering a plurality of peptide or peptidomimetic mols. that home to said selected organ or tissue by isolating mols comprising said tag from said sample.

IT **189023-76-5**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(method of identifying antitumor peptide or peptidomimetic mols. that home to a selected organ in vivo)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1984			EP 0135277	HCAPLUS
Anon	1992			WO 9200091	HCAPLUS
Anon	1992			WO 9203461	HCAPLUS
Anon	1992			WO 9206191	HCAPLUS
Anon	1995			EP 0639584	HCAPLUS
Anon	1995			WO 9514714	HCAPLUS
Baillie	1995	72	257	British J Cancer	MEDLINE
Bender	1995			US 5415874	HCAPLUS
Bevilasqua	1992			US 5081034	HCAPLUS
Burinoni	1994	91	355	Proc Natl Acad Sci U	
Burrows	1994	64	155	Pharmac Ther	HCAPLUS
Burton	1991	88	10134	Proc Natl Acad Sci U	HCAPLUS
Capon	1993			US 5225538	HCAPLUS
Capon	1995			US 5428130	HCAPLUS
Cattani	1995	123	14120m	Chem Abstr Immunoche	
Cattani	1995	18	135	Microbiologica	HCAPLUS
Davis	1996	24	702	Nucl Acids Res	HCAPLUS
Drolet	1996	14	1021	Nat Biotech	HCAPLUS
Dvorak	1991	3	77	Cancer Cells	MEDLINE
Goetz	1996	65	192	Int J Cancer	HCAPLUS
Gold	1993			US 5270163	HCAPLUS
Gold	1995	64	763	Annu Rev Biochem	HCAPLUS
Goodson	1994	91	7129	Proc Natl Acad Sci U	HCAPLUS
Hendrikx	1996	24	129	Expt Hematol	MEDLINE
Hicke	1996	98	2688	J Clin Invest	HCAPLUS
Huang	1997	275	547	Science	HCAPLUS
Lamarco	1995			US 5453362	HCAPLUS
Lappi, D	1995	6	279	Cancer Biology	HCAPLUS
Lasky	1992			US 5098833	HCAPLUS
Lasky	1993			US 5216131	HCAPLUS
Lasky	1994			US 5304640	HCAPLUS
Leff, D	1997	8	2	Bioworld Today	
Martiny-Baron	1995	6	675	Current Biology	HCAPLUS
Miner	1982	42	4631	Cancer Research	MEDLINE
Pasqualini	1996	380	364	Nature	HCAPLUS
Pasqualini	1997	15	542	Nature Biotechnol	HCAPLUS
Pauli	1990	9	175	Cancer and Metastasi	MEDLINE
Quertermous	1994			US 5288846	HCAPLUS
Seed	1996			US 5506126	HCAPLUS

Stephans	1997			US 5688935	HCAPLUS
Zhu	1991	88	9568	Proc Natl Acad	HCAPLUS

L28 ANSWER 11 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:291095 HCAPLUS
DN 132:329919
TI Modified peptides containing an antibody Fc domain as therapeutic agents
IN Feige, Ulrich; Liu, Chuan-fa; Cheetham, Janet; Boone, Thomas Charles
PA Amgen Inc., USA
SO PCT Int. Appl., 608 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000024782	A2	20000504	WO 1999-US25044	19991025 <--
	WO 2000024782	A3	20020606		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6660843	B1	20031209	US 1999-428082	19991022 <--
	EP 1144454	A2	20011017	EP 1999-971003	19991025 <--
	EP 1144454	A3	20020911		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 9914708	A	20020716	BR 1999-14708	19991025 <--
	JP 2003512011	T2	20030402	JP 2000-578351	19991025 <--
	AU 767725	B2	20031120	AU 2000-12322	19991025 <--
	NZ 510888	A	20040130	NZ 1999-510888	19991025 <--
	ZA 2001002753	A	20020611	ZA 2001-2753	20010404 <--
	NO 2001001963	A	20010621	NO 2001-1963	20010420 <--
	BG 105461	A	20030430	BG 2001-105461	20010424 <--
	US 2004044188	A1	20040304	US 2003-609217	20030627 <--
	US 2004053845	A1	20040318	US 2003-632388	20030731 <--
	US 2004071712	A1	20040415	US 2003-645761	20030818 <--
	US 2004057953	A1	20040325	US 2003-651723	20030829 <--
	US 2004087778	A1	20040506	US 2003-653048	20030829 <--
	US 2004077022	A1	20040422	US 2003-666696	20030919 <--
PRAI	US 1998-105371P	P	19981023 <--		
	US 1999-428082	A	19991022 <--		
	WO 1999-US25044	W	19991025 <--		
	US 2000-563286	A1	20000503		

AB The present invention concerns fusion of Fc domains with biol. active peptides and a process for preparing pharmaceutical agents using biol. active peptides. In this invention, pharmacol. active compds. are prepared by a process comprising: (a) selecting at least one peptide that modulates the activity of a protein of interest; and (b) preparing a pharmacol. agent comprising an Fc domain covalently linked to at least one amino acid of the selected peptide. Linkage to the vehicle increases the half-life of the peptide, which otherwise would be quickly degraded in vivo. The preferred vehicle is an Fc domain. The peptide is preferably selected by phage display, Escherichia coli coli display, ribosome display, RNA-peptide screening, or chemical-peptide screening.

IT **167776-74-1D**, fusion protein with IgG1 Fc domain
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(integrin-binding peptide; modified peptides containing an antibody Fc domain as therapeutic agents)

L28 ANSWER 12 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:15227 HCAPLUS
DN 132:77836
TI Improved process for preparing Schiff base adducts of amines with o-hydroxy aldehydes and compositions of matter based thereon
IN Hay, Bruce Allan; Clark, Michael Thomas
PA Pfizer Products Inc., USA
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000000507	A1	20000106	WO 1999-IB993	19990602 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9938424	A1	20000117	AU 1999-38424	19990602 <--
	EP 1087989	A1	20010404	EP 1999-921066	19990602 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
	BR 9912203	A	20010410	BR 1999-12203	19990602 <--
	TR 200003732	T2	20010621	TR 2000-20000373219990602 <--	
	JP 2002519356	T2	20020702	JP 2000-557268	19990602 <--
	RU 2201936	C2	20030410	RU 2000-133344	19990602 <--
	US 2003125528	A1	20030703	US 2002-256482	20020927 <--
PRAI	US 1998-90714P	P	19980626 <--		
	US 1998-90714	P	19980626 <--		
	WO 1999-IB993	W	19990602 <--		
	US 1999-337985	B1	19990622 <--		

OS MARPAT 132:77836
AB An improved process is described for preparing Schiff base condensation adduct final products whose components comprise a protein having beneficial activity in animals, and an aromatic o-hydroxy aldehyde, which comprises bringing together the above-mentioned components in an aqueous environment at a pH of 7.0 or higher to form a reaction mixture, under conditions effective to drive said condensation reaction substantially to completion by removing from about 97.0 % to about 99.9 % by weight, preferably from about 98.0 % to about 99.0 % by weight of the water already present or produced during said condensation reaction, consistent with maintaining the integrity of the condensation reactants and adduct final product, and to assure a rate of conversion to said condensation adduct final product, i.e. , with resulting yield of said condensation adduct final product of equal to or greater than about 98.5 % by weight, preferably equal to or greater than about 99.5 % by weight based on the weight of the reactants. Preferred aromatic o-hydroxy aldehydes comprise o-vanillin; salicylaldehyde; 2,3-dihydroxybenzaldehyde; 2,6-dihydroxybenzaldehyde; 2-hydroxy-3-ethoxybenzaldehyde; or pyridoxal. A very wide range of proteins may be employed. The improved process provides yields over 90 %

and substantially quant. conversion of the aldehyde and protein to the condensation adduct.

IT **110881-59-9**
RL: FFD (Food or feed use); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(improved process for preparing Schiff base adducts of peptide and protein amine groups with o-hydroxy aldehydes and compns. based thereon for food and drug use)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				US 4886659 A	HCAPLUS
Anon				US 5633351 A	HCAPLUS
Brandon, D	1985	78	87	Journal of Immunolog	HCAPLUS
Clark	1993			US 5198422 A	HCAPLUS
Dalgety UK Limited	1988			EP 0284186 A	HCAPLUS
Dhont, J	1975		193	Aroma Res Proc Int S	HCAPLUS
Dzhagarov, B	1994	61	95	Zh Prikl Spektrosk	HCAPLUS
Neorx Corporation	1990			WO 9003401 A	HCAPLUS
Tomlinson, A	1993	48	373	Food Chemistry	HCAPLUS
Williams, J	1968	154	323	Biochim Biophys Acta	HCAPLUS
Zaugg, R	1977	252	8542	Journal of Biologica	HCAPLUS
Zhu, T	1994	5	312	Bioconjugate Chemist	HCAPLUS

L28 ANSWER 13 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:819417 HCAPLUS
DN 132:77610
TI Antigenic complex comprising immunostimulatory peptide, CD4, and chemokine receptor domain for HIV treatment and immune disorders
IN Wang, Chang Yi
PA United Biomedical Inc., USA
SO PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9967294	A1	19991229	WO 1999-US14030	19990621 <--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6090388	A	20000718	US 1998-100409	19980620 <--
	CA 2330235	AA	19991229	CA 1999-2330235	19990621 <--
	AU 9947048	A1	20000110	AU 1999-47048	19990621 <--
	AU 766955	B2	20031030		
	BR 9912175	A	20010410	BR 1999-12175	19990621 <--
	EP 1098910	A1	20010516	EP 1999-930523	19990621 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	ZA 2000006385	A	20011011	ZA 2000-6385	20001107 <--
PRAI	US 1998-100409	A2	19980620 <--		
	WO 1999-US14030	W	19990621 <--		

AB The invention provides peptides comprising a sequence homologous to a portion of the CDR-2 like domain of CD4, covalently linked to a helper T cell epitope, and optionally to other immunostimulatory sequences as well. The invention provides for the use of such peptides as immunogens to elicit the production in mammals of high titer polyclonal auto-antibodies, which are specific to CD4 surface complex. These auto-antibodies prevent binding of HIV viral particles to CD4+ cells. The peptides are useful in pharmaceutical compns., to provide an immunotherapy for HIV infection and to protect against HIV infection.

IT **253274-50-9**
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antigenic complex comprising immunostimulatory peptide, CD4, and chemokine receptor domain for HIV treatment and immune disorders)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
United Biomedical Inc	1995			WO 9526365 A1	HCAPLUS
Vita, C	1998	47	93	Biopolymers	HCAPLUS

L28 ANSWER 14 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:686625 HCAPLUS
DN 131:319661
TI An insulin-dependent membrane aminopeptidase from GLUT-4 containing vesicles and a cDNA encoding it
IN Knowles, William J.; Guralski, Donna; Letsinger, John T.; Haigh, Wallace; Hart, John T.; Clairmont, Kevin B.
PA Bayer Corporation, USA
SO U.S., 51 pp., Cont.-in-part of U.S. Ser. No. 309,232, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5972680	A	19991026	US 1995-530792	19950919 <--
	US 5968764	A	19991019	US 1995-437116	19950504 <--
	CA 2200354	AA	19960328	CA 1995-2200354	19950919 <--
PRAI	US 1994-309232	B2	19940920 <--		

AB An aminopeptidase which cleaves insulin has been purified from GLUT-4-containing vesicles and cloned. The peptidase has a measured mass of .apprx.165 kDa, but is 110 kDa in its deglycosylated state. It has a predicted mol. weight of 117,239 based on the amino acid sequence predicted from the cDNA. Modulators of the activity of the aminopeptidase and a method for treating syndromes of insulin resistance, including diabetes, by administration of such a modulator are also claimed. Antibodies are raised against peptides of the enzyme. The enzyme was obtained from immunoaffinity-purified GLUT-4 vesicles as a 165-kDa protein and sequences from tryptic fragments identified it as an aminopeptidase and this was confirmed by anal. of substrate preferences and inhibition studies. A cDNA was cloned by PCR with amino acid sequence-derived primers.

IT **248250-62-6**
RL: PRP (Properties)
(unclaimed sequence; insulin-dependent membrane aminopeptidase from GLUT-4 containing vesicles and a cDNA encoding it)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File

James, D	1989	338	83	Letters to Nature	HCAPLUS
Kandror	1994	269	138	J Biol Chem	HCAPLUS
Kandror	1994	269	30777	J Biol Chem	HCAPLUS
Kandror	1994	91	8017	Proc Natl Acad Sci	HCAPLUS
Keller	1995	270	23612	J Biol Chem	HCAPLUS
Mastick	1994	269	6089	J Biol Chem	HCAPLUS
Rogi	1996	271	56	J Biol Chem	HCAPLUS
Tsujimoto, M	1992	292	388	Archives of Biochem	HCAPLUS
Verhey, K	1994	269	2353	J Biol, Chem	HCAPLUS
WIPO	1992			FR 9217575	

L28 ANSWER 15 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:375416 HCAPLUS
DN 131:27965
TI Prevention and treatment of amyloidogenic disease, especially Alzheimer's disease, based on induction of anti-amyloid immune response
IN Schenk, Dale B.
PA Athena Neurosciences, Inc., USA
SO PCT Int. Appl., 113 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9927944	A1	19990610	WO 1998-US25386	19981130	<--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
	CA 2312920	AA	19990610	CA 1998-2312920	19981130	<--
	AU 9917061	A1	19990616	AU 1999-17061	19981130	<--
	ZA 9810932	A	19990702	ZA 1998-10932	19981130	<--
	EP 1033996	A1	20000913	EP 1998-961833	19981130	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
	BR 9815357	A	20001024	BR 1998-15357	19981130	<--
	EE 200000379	A	20010416	EE 2000-20000037919981130		<--
	TR 200001608	T2	20010723	TR 2000-20000160819981130		<--
	JP 2002502802	T2	20020129	JP 2000-522929	19981130	<--
	NO 2000002784	A	20000731	NO 2000-2784	20000531	<--
	BG 104562	A	20010131	BG 2000-104562	20000627	<--
	HR 2000000443	A1	20001031	HR 2000-443	20000630	<--
	US 6710226	B1	20040323	US 2000-723384	20001127	<--
	US 6743427	B1	20040601	US 2000-724961	20001128	<--
	US 6750324	B1	20040615	US 2000-724552	20001128	<--
	US 2004081657	A1	20040429	US 2003-429216	20030502	<--
PRAI	US 1997-67740P	P	19971202	<--		
	US 1998-80970P	P	19980407	<--		
	US 1998-201430	A2	19981130	<--		
	WO 1998-US25386	W	19981130	<--		
	US 1999-322289	A1	19990528	<--		
	US 2000-580015	A1	20000526			
	US 2000-580018	A1	20000526			

AB The invention provides compns. and methods for treatment of amyloidogenic diseases. The methods entail administering an agent that induces a

beneficial immune response against an amyloid deposit in the patient. The methods are particularly useful for prophylactic and therapeutic treatment of Alzheimer's disease. In such methods, a suitable agent is Aβ peptide or an antibody thereto.

IT **214550-60-4D**, IgG conjugates
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prevention and treatment of amyloidogenic disease, especially Alzheimer's disease, based on induction of anti-amyloid immune response)

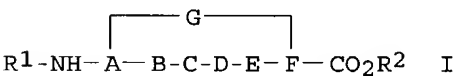
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
McMichael	1997			EP 0526511 B1	HCAPLUS
Prieels	1994			WO 940015306	HCAPLUS

L28 ANSWER 16 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:350685 HCAPLUS
DN 131:19306
TI Preparation of cyclic peptides having VLA-4 (very late antigen-4) adhesion inhibitory activity and medicinal use thereof
IN Takahashi, Toshiya; Saito, Nobuo; Takeshige, Hideyuki; Tanaka, Toshiaki; Kainoh, Mie
PA Toray Industries, Inc., Japan
SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9925731	A1	19990527	WO 1998-JP5096	19981112 <--
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 970965	A1	20000112	EP 1998-953029	19981112 <--
	R: DE, FR, GB, IT				
	US 6511961	B1	20030128	US 1999-341435	19990709 <--
PRAI	JP 1997-311692	A	19971113 <--		
	WO 1998-JP5096	W	19981112 <--		

OS MARPAT 131:19306
GI



I

AB Claimed are cyclic peptides represented by general formula [I; A, F = L- or D-Cys, -homo-Cys, -Pen, or -MprI, Asp, Glu, Aad, Dpr, Dab, Orn; B = L- or D-Ala, -Ala(t-Bu), -Val, -Leu, -Ile, -aIle, -Abu, -Nle, -Nva, -Tle, -Cha, -Chg, -Phe, -Phg, -Trp-, -Ala(3-Bzt), -Ala(1-Naph), -Ala(2-Naph), -Ala(2-Pyr), -Ala(2-Qui), -His,-Thi, -Ala(4-Thz), -2-Abz, -Pro, -homo-Pro, or -Tic; C = Asp analog, Glu analog, Aad analog, Asn analog, Gln analog, Ser, Ser(OMe), homo-Ser, Dpr, Dab, Orn, Met, Met(O), Met(O2), aIle, Nle, Nva, Chg, Phg, Tyr, Tle, etc.; D = L- or D-Tyr, -Ser, -homo-Ser, -Leu, -Ile, -aIle, -Nle, -Nva, -Chg, -Cha, -Val, Ala(t-Bu), -Abu, -Tle, -Ala,

-Phg, -homo-Phe, -Phe, -Ala(2-Naph), -Ala(2-Pyr), -Ala(3-Bzt), Ala(1-Naph), -Ala(2-Qui), -Thi, -Ala(4-Thz), -2-Abz, -Trp, or -His; G = disulfide or amide bond; R1 = H, acyl; R2 = H, C1-6 linear or branched alkyl] and the use thereof as remedies for inflammations, in particular allergic inflammations or hepatitis. These peptides are useful for the treatment of inflammatory diseases, e.g. allergic inflammations such as bronchial asthma, atopic dermatitis, and allergic rhinitis, hepatitis, nephritis, chronic arthrorheumatism, autoimmune diseases, rejection after organ transplant, type-1 diabetes, Crohn's disease, reinfarction after surgery, and arteriosclerosis. H-Cys-Chg-Asp-His-Leu-Cys-OH (cyclic disulfide) in vitro inhibited the binding of VLA-4-IgG chimera protein to immobilized CS-1 peptide (H-Cys-Leu-His-Gly-Pro-Glu-Ile-Leu-Asp-Val-Pro-Ser-Thr-OH)with IC50 of 120 nM. H-Cys-Ile-Met(O)-His-Leu-Cys-OH (cyclic disulfide) in vivo inhibited the increase in serum level of aspartic acid aminotransferase (AST) and that of alanine aminotransferase (ALT) in mouse having concanavalin-induced hepatitis by 27.0 and 38.7% at 100 μg/kg, resp.

IT **226568-50-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of cyclic peptides having VLA-4 (very late antigen-4) adhesion inhibitory activity for treatment of allergic inflammations and hepatitis)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Athena Neurosciences, I	1996			JP 10-506608 A	
Athena Neurosciences, I	1996			EP 769958 A1	HCAPLUS
Athena Neurosciences, I	1996			WO 96/1644 A1	
Texas Biotechnology Cor	1996			JP 10-502349 A	
Texas Biotechnology Cor	1996			EP 767674 A1	HCAPLUS
Texas Biotechnology Cor	1996			WO 96/581 A1	

L28 ANSWER 17 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:184464 HCAPLUS
DN 131:17404
TI Immunohistochemical localization of amyloid β-protein with amino-terminal aspartate in the cerebral cortex of patients with Alzheimer's disease
AU Arai, Tetsuaki; Akiyama, Haruhiko; Ikeda, Kenji; Kondo, Hiromi; Mori, Hiroshi
CS Department of Neuropathology, Tokyo Institute of Psychiatry, Setagaya-ku, Tokyo, 156-8585, Japan
SO Brain Research (**1999**), 823(1,2), 202-206
CODEN: BRREAP; ISSN: 0006-8993
PB Elsevier Science B.V.
DT Journal
LA English
AB We investigated immunohistochem. the localization of amyloid β-protein (Aβ) with amino-terminal aspartate (N1[D]) in brains of patients with Alzheimer's disease, diffuse Lewy body disease and Down's syndrome. A monoclonal antibody, 4G8, which recognizes the middle portion of Aβ, was used as a reference antibody to label the total Aβ deposits. Double staining with anti-Aβ(N1[D]) and 4G8 revealed that Aβ deposits in the subiculum and the neocortical deep layers often lacked N1[D] immunoreactivity, indicating N-terminal truncation of Aβ in these deposits. Aβ deposits in the neocortical superficial layers and the presubicular parvopyramidal layer always contained Aβ with N1[D]. Such regional as well as laminar differences in the distribution of Aβ beginning at N1[D] suggest that some local factors influence

N-terminal processing of Aβ deposited in the brain.

IT **214550-60-4**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(amyloid β-protein N-terminal truncation in human brains with Alzheimer's disease, diffuse Lewy body disease and Down's syndrome)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Arai, T	1995	15	21	Neuropathology	
Duyckaerts, C	1986	70	249	Acta Neuropathol	MEDLINE
Haas, C	1994	269	17741	J Biol Chem	
Haas, C	1992	359	322	Nature	
Haas, C	1994	91	1564	Proc Natl Acad Sci U	
Iwatsubo, T	1994	13	45	Neuron	HCAPLUS
Jarret, J	1993	73	1055	Cell	
Kaneko, T	1994	345	172	J Comp Neurol	MEDLINE
Maggio, J	1992	89	5462	Proc Natl Acad Sci U	HCAPLUS
Pike, C	1995	270	23895	J Biol Chem	HCAPLUS
Prior, R	1996	148	1749	Am J Pathol	MEDLINE
Rogers, J	1985	5	2801	J Neurosci	MEDLINE
Saido, T	1995	14	457	Neuron	HCAPLUS
Saido, T	1996	215	173	Neurosci Lett	HCAPLUS
Scheuner, D	1996	2	864	Nat Med	HCAPLUS
Seubert, P	1992	359	325	Nature	HCAPLUS

L28 ANSWER 18 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:677841 HCAPLUS
DN 129:321146
TI DNA encoding recombinant antibodies specific for β-amyloid ends for inhibiting Alzheimer's disease
IN Chain, Daniel G.
PA Mindset Ltd., Israel; Mcinnis, Patricia, A.
SO PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9844955	A1	19981015	WO 1998-US6900	19980409	<--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
	AU 9871034	A1	19981030	AU 1998-71034	19980409	<--
	AU 743827	B2	20020207			
	EP 994728	A1	20000426	EP 1998-918035	19980409	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
	NZ 337765	A	20010928	NZ 1998-337765	19980409	<--
	JP 2002503092	T2	20020129	JP 1998-543043	19980409	<--
	US 2002086847	A1	20020704	US 2001-975932	20011015	<--
	US 2003073655	A1	20030417	US 2002-84380	20020228	<--
PRAI	US 1997-41850P	P	19970409	<--		

WO 1998-US6900 W 19980409 <--
US 1999-402820 A3 19991012 <--

AB DNA encoding a recombinant antibody mol. end-specific for an amyloid-β peptide, pharmaceutical compns. thereof, and a method for preventing or inhibiting progression of Alzheimer's Disease by introducing such a DNA mol. into brain cells to express the recombinant antibody mol. and prevent the accumulation of amyloid-β peptides in the cerebrospinal fluid are disclosed.

IT **214550-60-4P**
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(DNA encoding recombinant antibodies specific for β-amyloid ends for inhibiting Alzheimer's disease)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Celltech Limited	1989			WO 8901975 A1	HCAPLUS
Hanan	1996	3	130	Amyloid:Int H Exp Cl	HCAPLUS
Ramont Univ Authority F	1996			WO 9618900 A1	HCAPLUS
Solomon	1996	93	452	Proc Natl Acad Sci U	HCAPLUS
Solomon	1997	94	4109	Proc Natl Acad Sci U	HCAPLUS
Takeda Chemical Industr	1995			EP 0683234 A1	HCAPLUS

L28 ANSWER 19 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:163619 HCAPLUS
DN 128:216368
TI Monoclonal antibodies that define unique meningococcal B epitopes and their use in the preparation of vaccine compositions
IN Granoff, Dan; Moe, Gregory R.
PA Chiron Corporation, USA
SO PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9808874	A1	19980305	WO 1997-US15167	19970827 <--
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 922059	A1	19990616	EP 1997-941371	19970827 <--
	EP 922059	B1	20031022		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6048527	A	20000411	US 1997-925002	19970827 <--
	JP 2001500372	T2	20010116	JP 1998-511915	19970827 <--
	AT 252602	E	20031115	AT 1997-941371	19970827 <--
	US 2002197260	A1	20021226	US 2001-910552	20010723 <--
	US 6642354	B2	20031104		
	US 2004077840	A1	20040422	US 2003-643465	20030819 <--
PRAI	US 1996-25799P	P	19960827 <--		
	US 1997-925002	A1	19970827 <--		
	WO 1997-US15167	W	19970827 <--		
	US 2000-494822	B3	20000131		
	US 2001-910552	A3	20010723		

AB Novel bactericidal antibodies against Neisseria meningitidis serogroup B ("MenB") are disclosed. The antibodies either do not cross-react or minimally cross-react with host tissue polysialic acid and hence pose minimal risk of autoimmune activity. The antibodies are used to identify

mol. mimetics of unique epitopes found on MenB or Escherichia coli K1 or anti-idiotype antibodies. Examples of such peptide mimetics are described that elicit serum antibody capable of activating complement-mediated bacteriolysis of MenB. Vaccine compns. containing such mimetics can be used to prevent MenB or E. coli K1 disease without the risk of evoking autoantibody.

IT **204320-71-8**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal antibodies against Neisseria meningitidis serotype B capsular polysaccharide derivative are used for identifying or isolating mimetic epitopes as vaccine and for treating infections)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Jennings, H	1987	165	1207	JOURNAL OF EXPERIMAN	HCAPLUS
Jennings, H	1986	137	1708	JOURNAL OF IMMUNOLOG	HCAPLUS
Mosc Epidemiology & Mic	1992			SU 1708846 A	
Nat Res Council Canada	1991			WO 9108772 A	
Wellcome Found Ltd	1985			EP 0145359 A	HCAPLUS

L28 ANSWER 20 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:525515 HCAPLUS
DN 127:229498
TI Evaluation of opioid receptor subtype antagonist effects in the ventral tegmental area upon food intake under deprivation, glucoprivic and palatable conditions
AU Ragnauth, Andre; Ruegg, Hildegard; Bodnar, Richard J.
CS Department of Psychology, Neuropsychology Doctoral Sub-Program, City University of New York, 65-30 Kissena Boulevard, Flushing, New York, USA
SO Brain Research (**1997**), 767(1), 8-16
CODEN: BRREAP; ISSN: 0006-8993
PB Elsevier
DT Journal
LA English
AB Opioid receptor subtype antagonists differentially alter food intake under deprivation (24 h), glucoprivic (2-deoxy-D-glucose, 500 mg/kg, i.p.) or palatable (10% sucrose) conditions with μ (β-funaltrexamine) and κ (nor-binaltorphamine), but not δ1 ([D-Ala2,Leu5,Cys6]enkephalin) opioid antagonists reducing each form of intake following ventricular microinjection. Both μ and κ opioid antagonists microinjected into either the hypothalamic paraventricular nucleus or the nucleus accumbens reduce intake under deprivation and glucoprivic conditions. Palatable intake is reduced by both antagonists in the paraventricular nucleus, but only μ antagonists are active in the accumbens. Food intake is stimulated by μ and δ, but not κ, opioid agonists microinjected into the ventral tegmental area. The present study examined whether food intake under either deprivation, glucoprivic or palatable conditions was altered by bilateral administration of general (naltrexone), μ, κ, δ1 or δ2 (naltrindole isothiocyanate) opioid antagonists into the ventral tegmental area. Deprivation (24 h)-induced feeding was significantly reduced by high (50 μg), but not lower (10-20 μg) doses of naltrexone (21%), and by δ2 (4 μg, 19%) antagonism in the ventral tegmental area. 2-Deoxy-D-glucose (500 mg/kg, i.p.)-induced hyperphagia was significantly reduced by high (50 μg), but not lower (20 μg) doses of naltrexone (64%), and by δ2 (4 μg, 27%) antagonism in the ventral tegmental area. Sucrose (10%) intake was significantly reduced by naltrexone (20-50 μg, 25-39%) and δ2 (4 μg, 25%)

antagonism in the ventral tegmental area. Neither μ, κ nor δ1 antagonists were effective in reducing any form of intake following microinjection into the ventral tegmental area. These data indicate that the ventral tegmental area plays a relatively minor role in the elicitation of these forms of food intake, and that δ2, rather than μ, κ or δ1 opioid receptors appear responsible for mediation of these forms of intake by this nucleus.

IT **110881-59-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(evaluation of opioid receptor subtype antagonist effects in ventral tegmental area upon food intake under deprivation and glucoprivic and palatable conditions in relation to receptor mediation)

L28 ANSWER 21 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:310016 HCAPLUS
DN 126:272341
TI Molecules that home to a selected organ or tissue in vivo, and methods of identifying them
IN Ruoslahti, Erkki; Pasqualini, Renata
PA La Jolla Cancer Research Foundation, USA
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE		APPLICATION NO.	DATE	
PI	WO 9710507	A1	19970320		WO 1996-US14600	19960910	<--
	W: AU, CA, JP						
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE						
	US 5622699	A	19970422		US 1995-526710	19950911	<--
	CA 2204535	AA	19970320		CA 1996-2204535	19960910	<--
	CA 2204535	C	20021112				
	AU 9669739	A1	19970401		AU 1996-69739	19960910	<--
	AU 693723	B2	19980702				
	EP 773441	A1	19970514		EP 1996-250195	19960910	<--
	EP 773441	B1	20000802				
	R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE						
	JP 10502674	T2	19980310		JP 1996-512087	19960910	<--
	EP 876611	A1	19981111		EP 1996-930824	19960910	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI						
	EP 987275	A2	20000322		EP 1999-250432	19960910	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI						
	AT 195181	E	20000815		AT 1996-250195	19960910	<--
	JP 2003155296	A2	20030527		JP 2002-245801	19960910	<--
	AU 9863740	A1	19980618		AU 1998-63740	19980430	<--
	AU 728668	B2	20010118				
	US 6743892	B1	20040601		US 1999-228866	19990112	<--
PRAI	US 1995-526708	A	19950911	<--			
	US 1995-526710	A	19950911	<--			
	EP 1996-250195	A3	19960910	<--			
	JP 1997-512087	A3	19960910	<--			
	WO 1996-US14600	W	19960910	<--			

AB The present invention provides an in vivo method for identifying mols. that home to a selected organ or tissue. In addition, the invention provides peptides that home to a selected organ or tissue. For example, the

invention provides peptides that selectively home to an organ, e.g. brain or kidney, or to a tissue, e.g. a tumor tissue. The invention further provides methods of using an organ homing mol. e.g. to target an agent such as a drug to a selected organ or to identify the target mol. expressed by the selected organ. The invention also provides methods of targeting an organ or tissue containing angiogenic vasculature by contacting the organ or tissue with a mol. that specifically binds an αv-containing integrin. Methods are demonstrated for preparing a phage library and screening the library using in vivo panning to identify phage-expressing peptides that home to a selected organ or tissue; peptide sequences are included. The brain-homing peptide CLSSRLDAC directs red blood cells to the brain. Also described is use of in vivo panning to identify peptides homing to a breast tumor or a melanoma.

IT **189023-76-5**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mols. homing to selected organ or tissue in vivo, and methods of identification and targeting)

L28 ANSWER 22 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:532938 HCAPLUS
DN 125:212481
TI Reductions in locomotor activity following central opioid receptor subtype antagonists in rats
AU Leventhal, Liza; Cole, Jessica L.; Bodnar, Richard J.
CS Queens Coll., City Univ. New York, Flushing, NY, 11367, USA
SO Physiology & Behavior (**1996**), 60(3), 833-836
CODEN: PHBHA4; ISSN: 0031-9384
PB Elsevier
DT Journal
LA English
AB Opioid agonists produce biphasic (decreases then increases) effects upon activity in rats. General opioid antagonists typically suppress activity. Selective opioid antagonists reduce weight and food intake. However, the latter effects cannot fully account for the former effects. To assess the possibility that selective opioid antagonists might decrease weight by increasing activity, the present study examined whether central administration of either μ (β-funaltrexamine: 20 μg), μ1 (naloxonazine: 50 μg), δ1 ([D-Ala2,Leu5,Cys6]enkephalin: 40 μg), δ2 (naltrindole isothiocyanate: 20 μg), or κ1 (nor-binaltorphamine: 20 μg) opioid antagonists altered total, ambulatory, or stereotypic activity. Each of the antagonists significantly reduced total (μ: 18%, μ1: 31%, δ1: 42%, δ2: 37%, κ1: 31%), ambulatory (μ: 17%, μ1: 27%, δ1: 34%, δ2: 37%, κ1: 31%), and stereotypic (μ: 19%, μ1: 34%, δ1: 49%, δ2: 37%, κ1: 31%) activity on the 1st day. All 3 activity measures were reduced by δ1 and δ2 antagonism on the 2nd day, whereas μ antagonism reduced total and stereotypic activity on the 2nd day. The activity redns. induced by selective opioid receptor subtype antagonists parallel effects induced by general opioid antagonism and suggest that antagonist-induced weight loss effects independent of intake redns. are not due to antagonist-induced hyperactivity.

IT **110881-59-9**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(redns. in locomotor activity following central opioid receptor subtype antagonists in rats)

L28 ANSWER 23 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:121113 HCAPLUS
DN 124:155998

TI Pharmaceutical compositions comprising an opiate antagonist and calcium salts and their use for the treatment of endorphin-mediated pathologies
IN Minoia, Paolo; Sciorsci, Raffaele Luigi
PA Italy
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9531985	A2	19951130	WO 1995-EP1931	19950522 <--
	WO 9531985	A3	19960104		
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TT, UA, US, UZ				
	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2190943	AA	19951130	CA 1995-2190943	19950522 <--
	AU 9526149	A1	19951218	AU 1995-26149	19950522 <--
	AU 708778	B2	19990812		
	EP 760661	A1	19970312	EP 1995-920851	19950522 <--
	EP 760661	B1	19981230		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CN 1151116	A	19970604	CN 1995-193758	19950522 <--
	CN 1083264	B	20020424		
	JP 10500423	T2	19980113	JP 1995-530058	19950522 <--
	HU 77920	A2	19981028	HU 1996-3228	19950522 <--
	AT 175114	E	19990115	AT 1995-920851	19950522 <--
	ES 2128735	T3	19990516	ES 1995-920851	19950522 <--
	US 5811451	A	19980922	US 1996-737902	19961121 <--
PRAI	IT 1994-MI1048	A	19940524 <--		
	WO 1995-EP1931	W	19950522 <--		

AB Combined use of opiate antagonists and of calcium salts for the preparation of medicaments for the treatment of endorphin-mediated pathologies is described. Cows with parenchymatous mastitis were treated for 2-3 days with naloxone-HCl 0.5 mg/100 kg, Ca gluconate 50 g, and protease (Endozym), showing complete remission of the symptoms.
IT **110881-59-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. containing opiate antagonist and calcium salts for treatment of endorphin-mediated disorders in human and veterinary medicine)

L28 ANSWER 24 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:781250 HCAPLUS
DN 123:191600
TI A peptide isolated from phage display libraries is a structural and functional mimic of an RGD-binding site on integrins
AU Pasqualini, Renata; Koivunen, Erkki; Ruoslahti, Erkki
CS Cancer Research Center, La Jolla Cancer Research Foundation, La Jolla, CA, 92037, USA
SO Journal of Cell Biology (**1995**), 130(5), 1189-96
CODEN: JCLBA3; ISSN: 0021-9525
PB Rockefeller University Press
DT Journal
LA English

AB Many integrins recognize short RGD-containing amino acid sequences and such peptide sequences can be identified from phage libraries by panning with an integrin. Here, is a reverse strategy, the authors have used such libraries to isolate minimal receptor sequences that bind to fibronectin and RGD-containing fibronectin fragments in affinity panning. A predominant cyclic motif, *CWDDG/LWLC*, was obtained (the asterisks denote a potential disulfide bond). Studies using the purified phage and the corresponding synthetic cyclic peptides showed that *CWDDGWLC*-expressing phage binds specifically to fibronectin and to fibronectin fragments containing the RGD sequence. The binding did not require divalent cations and was inhibited by both RGD and *CWDDGWLC*-containing synthetic peptides. Conversely, RGD-expressing phage attached specifically to immobilized *CWDDGWLC*-peptide and the binding could be blocked by the resp. synthetic peptides in solution Moreover, fibronectin bound to a *CWDDGWLC*-peptide affinity column, and could be eluted with an RGD-containing peptide. The *CWDDGWLC*-peptide inhibited RGD-dependent cell attachment to fibronectin and vitronectin, but not to collagen. A region of the β-subunit of RGD-binding integrins that has been previously demonstrated to be involved in ligand binding includes a polypeptide stretch, KDDLW (in β3) similar to WDDG/LWL. Synthetic peptides corresponding to this region in β3 were found to bind RGD-displaying phage and conversion of its two aspartic residues into alanines greatly reduced the RGD binding. Polyclonal antibodies raised against the *CWDDWGLC*-peptide recognized β1 and β3 in immunoblots. These data indicate that the *CWDDGWLC*-peptide is a functional mimic of ligand binding sites of RGD-directed integrins, and that the structurally similar site in the integrin β subunit is a binding site for RGD.

IT **167776-74-1**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(CWDDGWLC peptide isolated from phage display libraries is a structural and functional mimic of RGD-binding site on integrins)

L28 ANSWER 25 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:714707 HCAPLUS
DN 123:132693
TI Selective actions of central μ and κ opioid antagonists upon sucrose intake in sham-fed rats
AU Leventhal, Liza; Kirkham, Tim C.; Cole, Jessica L.; Bodnar, Richard J.
CS Department of Psychology and Neuropsychology Doctoral Sub-Program, Queens College, City University of New York, 65-30 Kissena Blvd., Flushing, NY, 11367, USA
SO Brain Research (**1995**), 685(1,2), 205-10
CODEN: BRREAP; ISSN: 0006-8993
PB Elsevier
DT Journal
LA English
AB Intake of a palatable sucrose solution in real-fed rats is mediated in part by central μ and κ opioid receptors. Since general opioid antagonists still inhibit sucrose intake in sham-fed rats, the present study examined whether centrally administered μ (β-funaltrexamine: 5, 20 μg), mu1 (naloxonazine: 50 μg), κ (nor-binaltorphamine: 1, 5, 20 μg), δ (naltrindole: 20 μg) or δ1 (DALCE: 40 μg) opioid subtype antagonists altered sucrose intake in sham-fed rats in a similar manner to systemic naltrexone (0.01-1 mg/kg) and whether such effects were equivalent to altering the sucrose concentration Sucrose (20%) intake in sham-fed rats was significantly and dose-dependently reduced by naltrexone (59%), β-funaltrexamine (44%) and nor-binaltorphamine (62%), but not by naloxonazine, naltrindole or DALCE. The redns. in sham

sucrose (20%) intake by general, μ and κ antagonism were similar in pattern and magnitude to diluting sucrose concentration from 20% to 10% in untreated sham-fed rats. Since both real-fed and sham-fed rats share similar patterns of specificity of opioid effects, magnitudes and potencies of inhibition, it suggests that central μ and κ antagonism acts on orosensory mechanisms supporting sucrose intake.

IT **110881-59-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(selective actions of central μ and κ opioid antagonists upon sucrose intake in sham-fed rats)

L28 ANSWER 26 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:579460 HCAPLUS
DN 122:306904
TI Reductions in body weight following chronic central opioid receptor subtype antagonists during development of dietary obesity in rats
AU Cole, Jessica L.; Leventhal, Liza; Pasternak, Gavril W.; Bowen, Wayne D.; Bodnar, Richard J.
CS Neuropsychology Doctoral Subprogram Psychology Department, Queens College, Fushing, NY, USA
SO Brain Research (**1995**), 678(1,2), 168-76
CODEN: BRREAP; ISSN: 0006-8993
PB Elsevier
DT Journal
LA English
AB Acute administration of long-acting general opioid antagonists reduces body weight and food intake in rats. In contrast, chronic administration of short-acting general opioid antagonists produces transient effects. The present study evaluated whether chronic central administration of selective long-acting antagonists of μ (β-funaltrexamine, BFNA, 20 μg), μ1 (naloxonazine, 50 μg), δ1 ([D-Ala2,Leu5,Cys6]-enkephalin, DALCE, 40 μg), δ2 (naltrindole isothiocyanate, NTII, 20 μg) or κ (nor-binaltorphimine, NBNI, 20 μg) opioid receptor subtypes altered weight and intake of rats exposed to a palatable diet of pellets, fat, milk and water, relative to pellet-fed and diet-fed controls. Diet-fed rats receiving chronic vehicle injections significantly increased weight (7-10%) and intake over the 11-day time course. Weight was significantly reduced over the time course in rats administered either BFNA (9%), naloxonazine (12%), DALCE (7%) or NTII (6%). Initial weight redns. failed to persist following chronic NBNI. All antagonists chronically reduced fat intake, but did not systematically alter total intake, pellet intake or milk intake relative to the pattern of weight loss. These data indicate that central μ, μ1, δ1, δ2, and, to a lesser degree, κ receptors mediate long-term opioid modulation of weight even in animals maintained on diets that ultimately result in dietary obesity.

IT **110881-59-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(body weight and food intake response to chronic administration of central opioid receptor subtype antagonists during development of dietary obesity)

L28 ANSWER 27 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:360535 HCAPLUS
DN 122:129480
TI Analysis of central opioid receptor subtype antagonism of hypotonic and hypertonic saline intake in water-deprived rats
AU Bodnar, Richard J.; Glass, Michael J.; Koch, James E.

CS Queens College, City University New York, Flushing, NY, 11367, USA
SO Brain Research Bulletin (**1995**), 36(3), 293-300
CODEN: BRBUDU; ISSN: 0361-9230
PB Elsevier
DT Journal
LA English
AB Intake of either hypotonic or hypertonic saline solns. is modulated in part by the endogenous opioid system. Morphine and selective mu and delta opioid agonists increase saline intake, while general opioid antagonists reduce saline intake in rats. The present study evaluated whether intracerebroventricular administration of general (naltrexone) and selective mu (beta-funaltrexamine, 5-20 μg), mu1 (naloxonazine, 50 μg), kappa (nor-binaltorphimine, 5-20 μg), delta (naltrindole, 20 μg), or delta1 (DALCE, 40 μg) opioid receptor subtype antagonists altered water intake and either hypotonic (0.6%) or hypertonic (1.7%) saline intake in water-deprived (24 h) rats over a 3-h time course in a two-bottle choice test. Whereas peripheral naltrexone (0.5-2.5 mg/kg) significantly reduced water intake and hypertonic saline intake, central naltrexone (1-50 μg) significantly reduced water intake and hypotonic saline intake. Water intake was significantly reduced following mu and kappa receptor antagonism, but not following mu1, delta, or delta1 receptor antagonism. In contrast, neither hypotonic nor hypertonic saline intake was significantly altered by any selective antagonist. These data are discussed in terms of opioid receptor subtype control over saline intake relative to the animal's hydrational state and the roles of palatability and/or salt appetite.
IT **110881-59-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(anal. of central opioid receptor subtype antagonism of hypotonic and hypertonic saline intake in water-deprived rats)

L28 ANSWER 28 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:273703 HCAPLUS
DN 122:46962
TI Binding affinity and selectivity of opioids at mu, delta and kappa receptors in monkey brain membranes
AU Emmerson, Paul J.; Liu, Man-Ru; Woods, James H.; Medzihradsky, Fedor
CS Departments Pharmacology, University Michigan Medical School, Ann Arbor, MI, USA
SO Journal of Pharmacology and Experimental Therapeutics (**1994**), 271(3), 1630-7
CODEN: JPETAB; ISSN: 0022-3565
PB Williams & Wilkins
DT Journal
LA English
AB The binding parameters of radiolabeled DAMGO (mu), DPDPE and pCl-DPDPE (delta) and U 69593 (kappa) and the affinity and selectivity profiles of various opioid agonists and antagonists at the three opioid receptor types were determined in membranes from brain cortex of rhesus monkey. Among the 10 opioids with established mu-selective actions, etonitazene inhibited the binding of [3H]DAMGO with a Ki of 0.02 nM (0.01 nM without sodium) and exhibited mu/delta and mu/kappa selectivities of 8800 and 11,650, resp. DAMGO had a Ki of 1.23 nM and was about 500-fold more selective at mu receptors compared with delta and kappa sites. Other mu opioids with higher than 100-fold binding selectivity were fentanyl and sufentanil. Highly 100-fold binding selectivity were fentanyl and sufentanil. Highly selective delta opioids were DPDPE, deltorphin II and naltrindole. With the exception of N,N-diallyl-Tyr-Aib-Aib-Phe-Leu-OH, all investigated

putative delta opioids bound to delta sites with low Kis, i.e., 0.04 nM, 0.13 nM and 1.4 nM for naltrindole, (±)-4-[(α-R*)-α-{(2S*,5R*)-4-allyl-2,5-dimethyl-1-piperazinyl}-3-hydroxybenzyl]-N,N-diethylbenzamide and DPDPE, resp. In this series, the displacement of [3H]pCl-DPDPE yielded results similar to those obtained with [3H]DPDPE. With nanomolar Kis of 0.70, 0.89, 0.25 and 0.06, resp., the highest kappa selectivity was displayed by (trans)-(±)-3,4-dichloro-N-methyl-N-[2-(1-pyrrolidinyl)-cyclohexyl]benzeneacetamide and U 69593, followed by dynorphin 1-13 and norbinaltorphimine. Both ethylketocyclazocine and bremazocine bound with high affinity to all three receptor types, showing a 15- to 127-fold preference for the kappa receptor. The binding of mu-, delta-, and kappa-selective agonists and antagonists exhibited distinct sensitivities to sodium. The results of this study, which revealed picomolar binding affinity and receptor selectivity up to 11,600-fold in the primate brain, should aid in interpreting opioid actions in vivo and in selecting receptor-specific ligands to characterize opioid receptor mechanisms in vitro.

IT **110881-59-9**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(binding affinity and selectivity of opioid receptors in monkey brain membranes)

L28 ANSWER 29 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:645948 HCAPLUS
DN 121:245948
TI Selective alterations in macronutrient intake of food-deprived or glucoprivic rats by centrally-administered opioid receptor subtype antagonists in rats
AU Koch, James E.; Bodnar, Richard J.
CS Department of Pharmacology, Mount Sinai School of Medicine, New York, NY, 10029, USA
SO Brain Research (**1994**), 657(1-2), 191-201
CODEN: BRREAP; ISSN: 0006-8993
DT Journal
LA English
AB Two hypotheses have attempted to account for the abilities of opioid agonists and antagonists to resp. stimulate and inhibit food intake in rats. The first suggests that the opioid system selectively modulates fat intake, while the second suggests that the opioid system selectively alters intake of that macronutrient which the animal prefers. The present study evaluated these two hypotheses by examining total intake and individual macronutrient intake in either food-deprived (24 h) rats or rats made glucoprivic with 2-deoxy-D-glucose (2DG, 200 mg/kg, i.p.) following either vehicle treatment, systemic administration of naltrexone or intracerebroventricular administration of either naltrexone, the mu opioid antagonist, beta-funaltrexamine (B-FNA), the mu1 opioid antagonist, naloxonazine, the kappa opioid antagonist, nor-binaltorphimine (Nor-BNI), the delta opioid antagonist, naltrindole or the delta1 opioid antagonist, DALCE. Systemic administration of naltrexone (0.5-5 mg/kg) significantly reduced carbohydrate, fat and total intake in deprived rats, and carbohydrate, fat, protein and total intake in glucoprivic rats. Central administration of naltrexone (5-50 μg) significantly reduced fat and total intake in both deprived and glucoprivic rats. B-FNA (5-20 ug) significantly reduced carbohydrate, fat and total intake in both deprived and glucoprivic rats. Naloxonazine (10-100 μg) significantly reduced carbohydrate, fat and total intake in deprived rats, but failed to alter 2DG intake. Nor-BNI (5-20 ug) significantly reduced fat and total intake in glucoprivic rats, but failed to alter deprivation intake. Neither

naltrindole (20 μg) nor DALCE (40 μg) altered intake in deprived or glucoprivic rats. Carbohydrate or fat preference in deprived rats significantly increased the amount of explained variance in the inhibitory actions of central naltrexone, B-FNA and naloxonazine upon deprivation-induced intake. Carbohydrate or fat preference in glucoprivic rats significantly increased the amount of explained variance in the inhibitory actions of systemic and central naltrexone, B-FNA, naloxonazine and Nor-BNI upon 2-DG hyperphagia. These data are discussed in terms of the contentions that opioids either selectively alter fat intake per se or selectively alter the preferred macronutrient.

IT **110881-59-9**, DALCE
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(opioid antagonists effects on macronutrient intake in food-deprived or glucoprivic rats)

L28 ANSWER 30 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:622406 HCAPLUS
DN 121:222406
TI Evidence for chemical differentiation of delta opioid receptor subtypes by the sulfhydryl reagent N-ethylmaleimide
AU Tam, Linda; Rafferty, Michael F.
CS Neurological Diseases Research, G. D. Searle and Co., Skokie, IL, 60077, USA
SO Receptor (**1994**), 4(2), 81-91
CODEN: RECEE5; ISSN: 1052-8040
DT Journal
LA English
AB In this study, the δ receptor-selective nonequil. affinity ligands, 5'-NTII and DALCE, and the nonspecific sulfhydryl reagent NEM were evaluated over a range of concns. and treatment conditions for their ability to selectively alter the binding properties of δ1- or δ2-preferring opioid radioligands in brain homogenate. Treatment of tissue prepns. with DALCE (0-10,000 nM) or NTII (0-10,000 nM) resulted in an equivalent concentration-dependent loss of binding capacity for the δ1 agonist 3H-DPDPE and the μ/δ2 agonist 3H-DSLET. In contrast, treatment of tissue with NEM (0-8000 μM) resulted in greater loss of 3H-DPDPE binding. Scatchard anal. of the binding of 3H-DPDPE, 3H-DSLET, and 3H-NTII in 3 mM NEM-treated rat brain P2 preparation revealed an equivalent decrease in affinity for the agonist ligands, but a significantly greater decrease in Bmax for 3H-DPDPE compared with control tissue values. Comparison of the Ki values for a series of δ-selective compds. against 3H-DSLET binding in control vs. 3 mM NEM treated P2 fraction showed differential effects of NEM on affinity within the series that were consistent with a selective depletion of δ1 sites. Overall, these results indicate that NEM treatment selectively reduced δ1 receptor binding, resulting in a preparation that is enriched in δ2 sites.
IT **110881-59-9**, DALCE
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(evidence for chemical differentiation of delta opioid receptor subtypes by sulfhydryl reagent N-ethylmaleimide)

L28 ANSWER 31 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:125345 HCAPLUS
DN 120:125345
TI Differential modulation of angiotensin II and hypertonic saline-induced drinking by opioid receptor subtype antagonists in rats
AU Ruegg, Hildegard; Hahn, Barry; Koch, James E.; Bodnar, Richard J.

CS Neuropsychology Doctoral Sub-Program, Queens College, City University of New York, Flushing, NY, 11367, USA
SO Brain Research (**1994**), 635(1-2), 203-10
CODEN: BRREAP; ISSN: 0006-8993
DT Journal
LA English
AB Opioid modulation of ingestion includes general opioid antagonism of different forms of water intake, μ2 receptor modulation of deprivation-induced water intake and δ2 receptor modulation of saccharin intake. Water intake is stimulated by both central administration of angiotensin II (ANG II) and peripheral administration of a hypertonic saline solution; both responses are reduced by general opioid antagonists. The present study examined whether specific opioid receptor subtype antagonists would selectively alter each form of water intake in rats. Whereas systemic naltrexone (0.1-2.5 mg/kg, s.c.) reduced water intake induced by either peripheral ANG II (500 μg/kg, s.c.) or hypertonic saline (3 mL/kg, 10%), intracerebroventricular (i.c.v.) naltrexone (1-50 μg) only inhibited central ANG II (20 ng)-induced hyperdipsia. Both forms of drinking were significantly and dose-dependently inhibited by the selective κ antagonist, nor-binaltorphamine (Nor-BNI, 1-20 μg). Whereas both forms of drinking were transiently reduced by the μ-selective antagonist, β-funaltrexamine (β-FNA, 1-20 μg), the μ1 antagonist, naloxonazine (40 μg) stimulated drinking following hypertonic saline. The δ1 antagonist, [D-Ala2,Leu5,Cys6]-enkephalin (DALCE, 1-40 μg) significantly reduced drinking following ANG II, but not following hypertonic saline; the δ antagonist, naltrindole failed to exert significant effects. These data indicate that whereas κ opioid binding sites modulate hyperdipsia following hypertonic saline, μ2, δ1 and κ opioid binding sites modulate hyperdipsia following ANG II. The μ1 opioid binding site may normally act to inhibit drinking following hypertonic saline.
IT **110881-59-9**, DALCE
RL: BIOL (Biological study)
(angiotensin II- and hypertonic saline-induced water drinking in response to)

L28 ANSWER 32 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:601738 HCAPLUS
DN 119:201738
TI Peptide fragments of hsp71 of Mycobacterium tuberculosis, and their use in diagnosis of tuberculosis
IN Ivanyi, Juraj; Elsaghier, Ashraf
PA Medical Research Council, UK
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9314118	A1	19930722	WO 1993-GB87	19930115 <--
	W: AU, CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9333586	A1	19930803	AU 1993-33586	19930115 <--
PRAI	GB 1992-949		19920117 <--		
	WO 1993-GB87		19930115 <--		

AB Peptides having a sequence the same as, or immunol. equivalent to, a linear epitope of the carboxyl-terminal region of M. tuberculosis heat-shock proteins, e.g. hsp71, are useful for the diagnosis of paucibacillary

tuberculosis (TB). Methods of diagnosis of TB using the peptides and kits including the peptides are also disclosed. Peptide sequences are included, as are results of an ELISA using the peptides to test sera of TB patients. An ELISA using hsp70 antigens to detect antibodies in TB patients is also described.

IT **143756-07-4**, Hsp71 carboxyl-terminal region fragment (Mycobacterium tuberculosis)
RL: USES (Uses)
(for tuberculosis immunochem. diagnosis)

L28 ANSWER 33 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:601329 HCAPLUS
DN 119:201329
TI Immunogenicity and antigenicity of chimeric picornaviruses which express hepatitis A virus (HAV) peptide sequences: Evidence for a neutralization domain near the amino terminus of VP1 of HAV
AU Lemon, Stanley M.; Barclay, Wendy; Ferguson, Morag; Murphy, Paula; Li, Jing; Burke, Karen; Wood, David; Katrak, Kersi; Sangar, David; et al.
CS Dep. Med., Univ. North Carolina, Chapel Hill, NC, 27599-7030, USA
SO Virology (**1992**), 188(1), 285-95
CODEN: VIRLAX; ISSN: 0042-6822
DT Journal
LA English
AB The authors evaluated the antigenic characteristics of chimeric picornaviruses created by inserting peptide sequences from hepatitis A virus (HAV) capsid proteins into the B-C loop of VP1 of Sabin strain type 1 poliovirus (PV-1). Fifteen viable chimeras were generated. Each retained the ability to be neutralized by polyclonal PV-1 antisera. Two chimeras (H15 and H2) stimulated production of low levels of HAV neutralizing antibodies in immunized rabbits or mice, although in both cases only a small fraction of immunized animals produced this response. The H15 chimera, which contains residues 13-24 of HAV VP1, elicited HAV neutralizing antibodies in three of nine rabbits and at least one of seven immunized mice. These results indicate that a neutralization domain exists in this region of VP1. However, human sera with high titers of antibodies to HAV failed to neutralize or immunoppt. this chimera, suggesting the absence of a antibody response to this neutralization domain following natural infection. Sera from rabbits immunized with H15 that did not develop HAV neutralizing antibodies contained antibodies reactive with the HAV peptide segment expressed by the H15 virus, indicating substantial differences in the specificities of antibodies elicited by this peptide segment among individual immunized rabbits. The H15 peptide insert was an effective antigen, as indicated by a high level of sensitivity of the H15 chimera to neutralization by a related anti-peptide antibody which was itself devoid of HAV neutralizing activity. One of 16 rabbits immunized with the H2 chimera (residues 101-108 of HAV VP1) developed HAV neutralizing antibodies, confirming both the presence and the highly conformational nature of a neutralization antigenic site involving these resides of HAV.

IT **149420-20-2**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of VP1 protein of hepatitis A virus, antigenicity of, structure in)

L28 ANSWER 34 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:557882 HCAPLUS
DN 119:157882
TI Identification of a linear neutralization site within the third variable region of the feline immunodeficiency virus envelope

AU Lombardi, Stefania; Garzelli, Carlo; La Rosa, Corinna; Zaccaro, Lucia; Specter, Steven; Malvaldi, Gino; Tozzini, Franco; Esposito, Fulvio; Bendinelli, Mauro
CS Dep. Biomed., Univ. Pisa, Pisa, 56127, Italy
SO Journal of Virology (**1993**), 67(8), 4742-9
CODEN: JOVIAM; ISSN: 0022-538X
DT Journal
LA English
AB Synthetic peptides were used to map linear B-cell epitopes of the third variable (V3) region of the feline immunodeficiency virus (FIV) external membrane glycoprotein gp120. The anal. of sera from naturally and exptl. FIV-infected cats by Pepscan and enzyme immunoassay with four partially overlapping peptides evidence three antibody-binding domains, two of which mapped in the C-terminal half of V3. In particular, the V3.3 sequence (Gly-392-Phe-413) turned out to be important for in vitro neutralization of the virus in that the peptide inhibited the FIV-neutralizing activity of pooled immune cat sera, and cat sera raised against this peptide effectively neutralized FIV infectivity for Crandell feline kidney cells.
IT **150243-06-4**
RL: BIOL (Biological study)
(of gp120 glycoprotein of feline immunodeficiency virus, in neutralizing antibody epitope mapping)

L28 ANSWER 35 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:531903 HCAPLUS
DN 119:131903
TI Mu-delta opioid interactions III: Differential antagonism of DPDPE-induced increases in morphine EEG and EEG power spectra by DALCE and naltrindole
AU Stamidis, Helen; Young, Gerald A.
CS Dep. Pharmacol. Toxicol., Univ. Maryland, Baltimore, MD, 21201, USA
SO Peptides (New York, NY, United States) (**1993**), 14(3), 511-17
CODEN: PPTDD5; ISSN: 0196-9781
DT Journal
LA English
AB In the present study, the effects of DALCE ([D-Ala2,Leu5,Cys6]enkephalin) and naltrindole on DPDPE ([D-Pen2,D-Pen5]enkephalin)-induced increases in morphine EEG and EEG power spectra were assessed. Adult female Sprague-Dawley rats were implanted with cortical EEG electrodes and permanent indwelling ICV and IV cannulae. Rats were pretreated with ICV DALCE at 15.7 nmol, ICV naltrindole at 20 nmol, or ICV sterile water. Rats were then administered ICV DPDPE at 2.5 nmol or ICV sterile water followed, 10 min later, by IV morphine at 3 mg/kg. Morphine-induced changes in EEG global (1-50 Hz) spectral parameters, the duration of morphine-induced high-voltage EEG bursts, the duration of EEG and behavioral excitation, and the latency to onset of slow-wave sleep were assessed. The DALCE pretreatment significantly decreased morphine-induced total spectral power seen in the DPDPE + morphine group. The DALCE pretreatment reversed the effects of DPDPE on the duration of morphine-induced EEG bursts and the duration of EEG and behavioral excitation. The ICV naltrindole, however, had no significant effect on DPDPE-induced increases in morphine EEG, EEG spectral parameters, and behavior. These data, therefore, suggest that DPDPE may be increasing the effects of morphine on EEG through DALCE-sensitive delta opioid receptors associated within the mu-delta opioid receptor complex.
IT **110881-59-9**
RL: BIOL (Biological study)
(δ-opioid receptors sensitivity to, in μ-δ-receptor complex)

L28 ANSWER 36 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:248026 HCAPLUS
DN 118:248026
TI Evidence for a single functional opioid delta receptor subtype in the mouse isolated vas deferens
AU Wild, K. D.; Carlisi, V. J.; Mosberg, H. I.; Bowen, W. D.; Portoghese, P. S.; Sultana, M.; Takemori, A. E.; Hruby, V. J.; Porreca, F.
CS Health Sci. Cent., Univ. Arizona, Tucson, AZ, USA
SO Journal of Pharmacology and Experimental Therapeutics (**1993**), 264(2), 831-8
CODEN: JPETAB; ISSN: 0022-3565
DT Journal
LA English
AB The identification of opioid δ receptor subtypes in mouse brain led to the investigation of the nature of the opioid δ receptors in the mouse isolated vas deferens in vitro. Noncumulative concentration-effect curves were constructed for DPDPE (δ, agonist) and [D-Ala2,Glu4]deltorphin (δ2 agonist) in control tissues, or in tissues which had been incubated with either [D-Ala2,Leu5,Cys6]enkephalin (DALCE) (noncompetitive δ1 antagonist) or 5'-naltrindole isothiocyanate (5'-NTII) (noncompetitive δ2 antagonist). Incubation of the tissues with DALCE, under either oxygenated or nonoxygenated conditions, did not alter the concentration-effect curves for either agonist. In contrast, incubation of the tissues with 5'-NTII resulted in a rightward displacement of the concentration-effect curves of both DPDPE and [D-Ala2,Glu4]deltorphin. Addnl., naltriben, a selective and competitive δ2 antagonist, showed no difference in its ability to antagonize a fixed, submaximal concentration of either DPDPE or [D-Ala2,Glu4]deltorphin. Furthermore, there was no difference in the affinity of naloxone (i.e., pA2) at the receptor(s) acted upon by either DPDPE or [D-Ala2,Glu4]deltorphin. Tolerance to DPDPE or [D-Ala2,Glu4]deltorphin was produced by incubation of the tissues with these agonists; construction of the [D-Ala2,Glu4]deltorphin concentration-effect curve in DPDPE-tolerant tissues demonstrated cross-tolerance between these agonists and, conversely, construction of DPDPE concentration-effect curves in [D-Ala2,Glu4]deltorphin-tolerant tissues revealed cross-tolerance between these agonists. Thus, the present data provide support for one subtype of opioid δ receptor in the mouse isolated vas deferens based on (1) the lack of antagonism of the effects of both agonists selective for δ1 and δ2 receptor subtypes by DALCE, a δ1 antagonist, (2) the antagonism of δ1 and δ2 agonists by 5'-NTII or naltriben (δ2 antagonists), (3) the similar antagonist potency of NTB against either DPDPE or [D-Ala2,Glu4]deltorphin, (4) the lack of difference in the naloxone pA2 against either δ agonist and (5) the demonstration of 2-way cross-tolerance between the effects of DPDPE and [D-Ala2,Glu4]deltorphin in this tissue.
IT **110881-59-9**
RL: BIOL (Biological study)
(δ-opioid receptors subtype affinity for, of vas deferens)

L28 ANSWER 37 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:585105 HCAPLUS
DN 117:185105
TI A study of the effect of the irreversible delta receptor antagonist [D-Ala2,Leu5,Cys6]-enkephalin on δcx and δncx opioid binding sites in vitro and in vivo
AU Rothman, Richard B.; Bykov, Victor; Jacobson, Arthur E.; Rice, Kenner C.; Long, Joseph E.; Bowen, Wayne D.
CS Addict. Res. Cent., NIDA, Baltimore, MD, 21224, USA
SO Peptides (New York, NY, United States) (**1992**), 13(4), 691-4

CODEN: PPTDD5; ISSN: 0196-9781
DT Journal
LA English
AB Several lines of data support the existence of 2 classes of delta receptors: the δcx binding site, which is the δ binding site of the μ-δ opioid receptor complex, and the δncx, which is the noncomplexed δ receptor. [D-Ala2,Leu5,Cys6]enkephalin (DALCE) is an extended analog of [Leu5]enkephalin, which has been shown to bind irreversibly to δ receptors via the terminal cysteine by formation of a disulfide bond with the receptor. In vivo studies have shown that DALCE produces short-lived antinociceptive actions, followed by long-term antagonism of δ receptor-mediated antinociception. The major goal of the present study was to examine the effect of DALCE on the δcx and δncx binding sites in vitro and in vivo. Intracerebroventricular administration of 40 μg DALCE failed to decrease [3H][D-Ala2,D-Leu5]enkephalin binding to the δcx and δncx binding sites. Pretreatment of membranes with DALCE in vitro greatly reduced the Bmax of the δncx binding site, without altering the Bmax of the δcx binding site. These findings suggest that when administered in vivo, DALCE fails to distribute uniformly throughout the brain, and that it therefore binds covalently to opioid receptors mostly in the periventricular regions. Viewed collectively, these data support the hypothesis that DALCE acts as a selective δncx antagonist, and that the δncx binding site, which is sensitive to DALCE, is most likely synonymous with the recently described δ1 receptor.
IT **110881-59-9**
RL: BIOL (Biological study)
(δcx- and δncx-opioid receptor binding of, in brain regions)

L28 ANSWER 38 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:569125 HCAPLUS
DN 117:169125
TI Localization of linear epitopes at the carboxy-terminal end of the mycobacterial 71 kDa heat shock protein
AU Elsaghier, Ashraf; Lathigra, Raju; Ivanyi, Juraj
CS R. Prostgrad. Med. Sch., London, W12 OHS, UK
SO Molecular Immunology (**1992**), 29(9), 1153-6
CODEN: MOIMD5; ISSN: 0161-5890
DT Journal
LA English
AB Four distinct linear epitopes localized within species-specific sequences at the C-terminal end of the 71 kDa heat shock protein of Mycobacterium tuberculosis have been identified by scanning 94 overlapping peptides with 13 human sera. One epitope (C) of entirely M. tuberculosis-specific core sequence (GEAGPG) has been found immunogenic in smear-neg. tuberculosis, but not in non-tuberculous mycobacterial diseases. This peptide appears to be a valuable candidate for further serodiagnostic evaluation.
IT **143756-07-4**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of hsp71 protein of Mycobacterium tuberculosis, epitopes for humans in relation to)

L28 ANSWER 39 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:166601 HCAPLUS
DN 116:166601
TI Spinal opioid delta antinociception in the mouse: mediation by a 5'-NTII-sensitive delta receptor subtype

AU Mattia, A.; Farmer, S. C.; Takemori, A. E.; Sultana, M.; Portoghese, P. S.; Mosberg, H. I.; Bowen, W. D.; Porreca, F.
CS Health Sci. Cent., Univ. Arizona, Tucson, AZ, USA
SO Journal of Pharmacology and Experimental Therapeutics (**1992**), 260(2), 518-25
CODEN: JPETAB; ISSN: 0022-3565
DT Journal
LA English
AB Previous studies have indicated that i.c.v. pretreatment of mice with the novel, selective opioid δ receptor antagonists, [D-Ala2,Leu5,Cys6]enkephalin (DALCE) and naltrindole-5'-isothiocyanate (5'-NTII), differentially antagonized the direct antinociceptive effects of [D-Pen2,D-Pen5]enkephalin (DPDPE) and [D-Ala2]deltorphin II (DELT). These findings, and others, suggested the existence of subtypes of opioid δ receptors which could be classified as activated by DPDPE and DALCE sensitive (δ1 receptor), or selectively activated by DELT and 5'-NTII sensitive (δ2 receptor). The present study has extended these observations to the characterization of δ-mediated antinociception at the spinal level; thus, the direct antinociceptive effects of DPDPE and DELT after i.t. administration was studied in mice by using pretreatment with DALCE and 5'-NTII in order to selectively antagonize the δ subtypes. Addnl., the acute antinociceptive actions of DALCE itself were studied to ensure activity of this compound at the spinal level. The resp. antinociceptive A50 value (95% CL) for i.t. DPDPE, DELT, and DALCE were 19.0, 19.3, and 2.0 nmol. The δ antagonist, ICI 174,864, blocked the antinociceptive effects of DPDPE and DELT, but not those of i.t. morphine or [D-Ala2,NMPhe4,Gly-ol5]enkephalin (DAMGO), indicating that the observed antinociceptive effects of DPDPE and DELT were δ mediated. Pretreatment 24 h before testing with graded doses of i.t. 5'-NTII blocked the i.t. antinociceptive effects of DPDPE and DELT, although at least a 10-fold higher dose of 5'-NTII was needed to produce equivalent antagonism of DPDPE. Similarly, i.t. pretreatment with 5'-NTII antagonized i.t. DALCE. In contrast, 24 h of pretreatment with i.t. DALCE failed to block DPDPE, DELT or DALCE-induced antinociception. The antagonism of the spinal antinociceptive effects of DPDPE, DELT and DALCE by 5'-NTII, but not by DALCE, suggests that the spinal opioid δ receptor involved in antinociception is a 5'-NTII sensitive (i.e., δ2) subtype.
IT **110881-59-9**
RL: PRP (Properties)
(spinal analgesic effects of, δ opioid receptor subtypes in mediation of)

L28 ANSWER 40 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:648347 HCAPLUS
DN 115:248347
TI Differential antagonism of opioid delta antinociception by [D-Ala2,Leu5,Cys6]enkephalin and naltrindole 5'-isothiocyanate: evidence for delta receptor subtypes
AU Jiang, Q.; Takemori, A. E.; Sultana, M.; Portoghese, P. S.; Bowen, W. D.; Mosberg, H. I.; Porreca, F.
CS Health Sci. Cent., Univ. Arizona, Tucson, AZ, 85724, USA
SO Journal of Pharmacology and Experimental Therapeutics (**1991**), 257(3), 1069-75
CODEN: JPETAB; ISSN: 0022-3565
DT Journal
LA English
AB The present study investigated the direct opioid δ receptor-mediated antinociception produced by intracerebroventricular (i.c.v.) administration of the highly selective δ agonists,

[D-Pen2,D-Pen5]enkephalin (DPDPE) and [D-Ala2]deltorphin II, as well as that of the less δ-selective [D-Ser2,Leu5,Thr6]enkephalin (DSLET), by using 2 novel nonequil. opioid antagonists, [D-Ala2,Leu5,Cys6]enkephalin (DALCE) and naltrinodole 5'-isothiocyanate (5'-NTII). At times ranging 8 - 48 h after a single i.c.v. pretreatment of mice with 5'-NTII, the antinociceptive effects of [D-Ala2]deltorphin II were antagonized. In contrast, 5'-NTII pretreatment at times between 10 min and 24 h failed to antagonize the antinociceptive effects of DPDPE. Previous studies have that pretreatment with i.c.v. DALCE produces a dose- and time-related antagonism of DPDPE, but not morphine, antinociception. However, pretreatment with i.c.v. DALCE failed to antagonize the antinociceptive effects of [D-Ala2]deltorphin II. Similarly, i.c.v. administration of DSLET produced time- and dose-related antinociception which was partially antagonized by either β-funaltrexamine (β-FNA) or by ICI 174,864 (N,N-diallyl-Tyr-Aib-Aib-PHe-Leu-OH), suggesting mixed activity at μ and δ receptors. ICI 174,864 produced essentially complete antagonism of DSLET antinociception in β-FNA-pretreated mice. Pretreatment with 5'-NTII (at -8 to -48 h), blocked the antinociception produced by DSLET in control or in β-FNA-pretreated mice. In contrast, pretreatment with DALCE failed to antagonize the antinociception produced by i.c.v. DSLET in either control or in β-FNA-pretreated mice. These data show that the antinociceptive actions of [D-Ala2]deltorphin II and of DSLET are sensitive to the novel δ antagonist, 5'-NTII but not to DALCE. In contrast, the antinociception of DPDPE is sensitive to DALCE, but not to 5'-NTII. The differential antagonism of antinociception produced by these selective δ agonists suggests the existence of δ receptor subtypes.

IT **110881-59-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(δ-opioid receptor subtype antagonist)

L28 ANSWER 41 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:551136 HCAPLUS
DN 115:151136
TI Ingestive behavior following central [D-Ala2,Leu5,Cys6]-enkephalin (DALCE), a short-acting agonist and long-acting antagonist at the delta opioid receptor
AU Arjune, Dulmanie; Bowen, Wayne D.; Bodnar, Richard J.
CS Queens Coll., City Univ. New York, Flushing, NY, 11367, USA
SO Pharmacology, Biochemistry and Behavior (**1991**), 39(2), 429-36
CODEN: PBBHAU; ISSN: 0091-3057
DT Journal
LA English
AB DALCE (1-40 μg, intracerebroventricularly), a short-acting agonist and long-acting antagonist at the delta opioid receptor, was examined for its effects upon food intake in rats under spontaneous, deprivation, glucoprivic and palatable conditions. DALCE (10 μg) stimulated free feeding for up to 10 h but only minimally decreased (40 μg) food intake and body weight after 24-72 h. DALCE, administered prior to food deprivation (24 h), failed to affect subsequent 24-h intake and sporadically decreased intake and body weight change after 48-72 h. 2-Deoxy-D-glucose (650 mg/kg, i.p.) hyperphagia was transiently (2 h) decreased by long-term DALCE (10 μg) pretreatment. Hyperphagia following exposure to a high-fat diet was potentiated by long-term DALCE (1 μg) pretreatment. DALCE (10 μg) hyperphagia (2-10 h) was eliminated by central pretreatment with either naltrexone (20 μg) or the kappa antagonist, nor-binaltorphamine (20 μg) but was minimally affected by central pretreatment with the mu antagonist, beta-funaltrexamine (20 μg) or long-term DALCE (40 μg).

The general inability of the antagonist actions of DALCE to alter these forms of feeding argues against a role for the delta opioid receptor in these responses.

IT **110881-59-9**, DALCE
RL: BIOL (Biological study)
(feeding behavior response to central administration of, delta receptor involvement in relation to)

L28 ANSWER 42 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:136171 HCAPLUS
DN 114:136171
TI Pharmacological characterization of [D-Ala2,Leu5,Ser6]enkephalin (DALES): antinociceptive actions at the δnon-complexed-opioid receptor
AU Mattia, Antonia; Vanderah, Todd; Mosberg, Henry I.; Omnaas, John R.; Bowen, Wayne D.; Porreca, Frank
CS Health Sci. Cent., Univ. Arizona, Tucson, AZ, 85724, USA
SO European Journal of Pharmacology (**1991**), 192(3), 371-5
CODEN: EJPHAZ; ISSN: 0014-2999
DT Journal
LA English
AB Opioid δ receptors may be distinguished on the basis of their involvement in the modulation (i.e., increase or decrease in potency) of μ-mediated antinociception. Some opioid δ receptors may exist within a functional complex with μ receptors (δcomplexed (δcx) receptors), whereas other δ sites do not (δnon-complexed (δncx) receptors). [D-Ala2,Leu5,Cys6]enkephalin (DALCE) produces initial antinociceptive actions, does not modulate morphine antinociception, and appears to bind irreversibly to the δncx site, presumably by means of thiol-disulfide exchange between the receptor and the cysteine sulfhydryl group. To determine if a structural basis exists for actions at the hypothesized δncx receptor, the pharmacol. characterization of [D-Ala2,Leu5,Ser6]enkephalin (DALES), a close structural analog of DALCE, was reported. If a structural basis for action at the δncx site exists, then DALES would be predicted to produce antinociception, fail to modulate morphine antinociception, and (since it lacks the free sulfhydryl group present in DALCE) fail to exhibit irreversible antagonistic actions; these predictions were supported. These observations in vivo support the concept of a structural basis for activity at the hypothesized δncx site and suggest that DALES, like DALCE, may be a useful probe for pharmacol. characterization of putative δ receptor subtypes.
IT **110881-59-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(analgesic activity of, δ-receptor mediation of)

L28 ANSWER 43 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:36264 HCAPLUS
DN 114:36264
TI Opioid agonist and antagonist antinociceptive properties of [D-Ala2,Leu5,Cys6]enkephalin: selection actions at the deltanoncomplexed site
AU Qi, Jiang; Bowen, Wayne D.; Mosberg, Henry I.; Rothman, Richard B.; Porreca, Frank
CS Health Sci. Cent., Univ. Arizona, Tucson, AZ, 85724, USA
SO Journal of Pharmacology and Experimental Therapeutics (**1990**), 255(2), 636-41
CODEN: JPETAB; ISSN: 0022-3565
DT Journal

LA English
AB The irreversibly binding enkephalin analog, [D-Ala2,Leu5,Cys6]enkephalin (DALCE) was used in an effort to determine whether selective agonist and antagonist properties could be demonstrated at hypothesized types of opioid delta receptors previously termed the deltanoncomplexed and the deltacomplexed sites. These putative subtypes of delta receptors have been functionally distinguished on the basis of involvement (i.e., deltacomplexed) in the modulation of mu-mediated effects such as antinociception. Intracerebroventricular (i.c.v.) administration of DALCE or the reference delta and mu agonists, [D-Pen2,D-Pen5]enkephalin (DPDPE) and morphine, to mice produced antinociception in the warm-water tail-flick test in a dose- and time-related manner. Maximal effects with DALCE were seen at 10 min and significant antinociception could be detected for .apprx.1 h; DALCE was 3- and 90-fold more potent than i.c.v. morphine and DPDPE, resp. The antinociceptive effects of i.c.v. DALCE and DPDPE, but not those of morphine, were antagonized by the selective delta antagonist, N,N-diallyl-Tyr-Aib-Aib-Phe-Leu-OH, suggesting that the antinociception associated with the peptides was mediated through a delta receptor. DALCE pretreatment up to 24 h before testing, a time at which this compound did not produce antinociception, blocked the i.c.v. DPDPE antinociceptive effect as well as that of DALCE itself, but not that of morphine, suggesting long-lasting DALCE antagonism at a delta receptor. Modulation of morphine antinociception was demonstrated with subeffective doses of i.c.v. DPDPE or [Met5]enkephalin, but not with subeffective doses of i.c.v. DALCE. In addition to a lack of modulation of morphine antinociception after acute administration, i.c.v. DALCE (at -24 h) did not directly antagonize the antinociceptive actions of morphine or block the modulation of morphine by DPDPE or [Met5]enkephalin. Apparently, i.c.v. DALCE given acutely produces direct antinociceptive actions through a supraspinal delta receptor, and DALCE may subsequently act as a long-lasting delta antagonist. However, unlike the actions of DPDPE or [Met5]enkephalin, neither the direct delta agonist or antagonist actions of DALCE are associated with indirect modulation of morphine antinociception. These findings provide further support for the concept of a functional opioid mu-delta receptor complex and support the existence of subtypes of opioid delta receptors that may be distinguished on the basis of their modulation of mu agonist actions (i.e., deltacomplexed and deltanoncomplexed receptors). DALCE appears to selectively interact with the deltanoncomplexed receptor.
IT **110881-59-9**
RL: BIOL (Biological study)
(analgesia from brain administration of, delta-receptor subtypes in relation to)

L28 ANSWER 44 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:192185 HCAPLUS
DN 112:192185
TI Stress-induced tolerance to delta receptor agonist DPDPE and selectivity of the irreversible δ-ligand, DALCE
AU Calcagnetti, Daniel J.; Bowen, Wayne D.; Holtzman, Stephen G.
CS Sch. Med., Emory Univ., Atlanta, GA, 30322, USA
SO Brain Research (**1990**), 509(2), 205-12
CODEN: BRREAP; ISSN: 0006-8993
DT Journal
LA English
AB Expts. were conducted to provide further evidence of the selectivity of [D-Ala2,Leu5,Cys6]enkephalin (DALCE) as an antagonist of δ-receptor ligands and to use DALCE as a tool to explore the possible role of δ-receptors in restraint stress. Dose- and time-response curves were generated for the resp. δ- and μ-selective opioid agonists

DPDPE (3-30 μg) and DAGO (0.03-0.3 μg) to increase the latency to paw-lick in the hot-plate test in rats. Both agonists produced robust analgesia lasting at least 20 min when injected intracerebroventricularly (i.c.v.). DALCE (0.4-10 μg) administered i.c.v. 24 h earlier failed to affect baseline pain sensitivity. DALCE pretreatment dose-dependently blocked the increase in paw-lick latency produced by DPDPE (30 μg) but not that induced by an equivalent analgesic dose of DAGO (0.3 μg). Whether 1 h of restraint stress would alter δ-receptor sensitivity as indexed by DPDPE-induced analgesia and attenuate the ability of DALCE to functionally antagonize DPDPE-induced analgesia were also determined Rats were assigned to 1 of 4 treatment groups: i.c.v. vehicle injection/no stress; vehicle/stress; i.c.v. DALCE (10 μg)/no stress; DALCE/stress. Twenty-four hours after treatment, dose- and time-response curves were generated to test the ability of DPDPE (30-120 μg) to increase paw-lick latency. Prior exposure to stress alone produced tolerance to DPDPE-induced analgesia. DALCE pretreatment antagonized DPDPE similarly regardless of stress condition. The effects of both stress and DALCE were surmounted by the highest dose of DPDPE. It is possible that DPDPE produced analgesia by acting at sites other than δ-receptors. Thus, DALCE is a selective δ-antagonist and stress can induce tolerance to the analgesic effect of DPDPE.

IT **110881-59-9**
RL: BIOL (Biological study)
(enkephalin analgesia inhibition by, δ-opioid receptors in)

L28 ANSWER 45 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1989:471272 HCAPLUS
DN 111:71272
TI [D-Ala2,Leu5,Cys6]enkephalin: short-term agonist effects and long-term antagonism at delta opioid receptors
AU Calcagnetti, Daniel J.; Fanselow, Michael S.; Helmstetter, Fred J.; Bowen, Wayne D.
CS Dep. Psychol., Dartmouth Coll., Hanover, NH, 03755, USA
SO Peptides (New York, NY, United States) (**1989**), 10(2), 319-26
CODEN: PPTDD5; ISSN: 0196-9781
DT Journal
LA English
AB The in vivo short-term effects (<35 min) and the in vivo long-term effects (>2 days) of the synthetic enkephalin analog, [D-Ala2,Leu5,Cys6]enkephalin (DALCE) were examined In the short term, DALCE produced analgesia and transient immobility after intracerebroventricular (ICV) administration. A dose-related increased was found in paw-lick latency for rats placed on a hotplate (52°). In the 2nd experiment, immobility was attenuated by pretreatment with naltrexone methobromide (QNTX, 0.1 μg), and the δ selective antagonist, 16-Me cyprenorphine (M80, 5 μg), QNTX and M80 also attenuated DALCE-induced immobility by >50% of control. Paw-lick latency was then measured on the hotplate to assess analgesia. Pretreatment with M80 reliably attenuated the DALCE-induced analgesia. Whereas QNTX failed to reliably attenuate paw-latency on the 1st trial, it was as effective as M80 on the 2nd trial. Evidently, the short-term agonist effects of DALCE are produced by actions at μ and δ opioid receptors as would be predicted from prior in vitro studies showing moderate to high affinity, resp., at these receptors. In the 3rd experiment, DALCE displayed long-term behavioral antagonism that was selective for the δ receptor. Rats were injected ICV with 6.7 μg of DALCE and tested 48 h later. Analgesia was measured by injecting 15% formalin s.c. followed 20 min later by an ICV injection of 1 of 3 selective opioid agonists (DAGO, DPDPE, or U50488H). At the doses tested, these agonists produced an equivalent level of analgesia as indicated by reduction in formalin-induced behavior. DPDPE-induced analgesia was completely blocked

by pretreatment with DALCE but analgesia produced by DAGO and U50488H was not affected. In vivo DALCE apparently acts like a long-term (irreversible) antagonist selective for δ receptors. The 4th experiment tested DALCE's ability to reverse conditional fear-induced analgesia that has previously been shown to involve δ receptors. Rats received footshocks in an observation chamber and were injected ICV with DALCE (6.7 μg) or saline either 24, 48, or 72 h prior to testing. DALCE was equally effective at increasing formalin-induced behavior in rats treated at each interval. DALCE's reversal of conditional analgesia 72 h after injection suggests that this peptide acts like an irreversible antagonist. The results support a role for δ receptor involvement in the expression of conditional analgesia.

IT **110881-59-9**
RL: BIOL (Biological study)
(long- and short-term effects of, delta receptor mediation of)

L28 ANSWER 46 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1987:629550 HCAPLUS
DN 107:229550
TI Affinity labeling of δ-opiate receptors using [D-Ala2,Leu5,Cys6]enkephalin. Covalent attachment via thiol-disulfide exchange
AU Bowen, Wayne D.; Hellewell, Susan B.; Kelemen, Mark; Huey, Roger; Stewart, Darryl
CS Sect. Biochem., Brown Univ., Providence, RI, 02912, USA
SO Journal of Biological Chemistry (**1987**), 262(28), 13434
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
AB [D-Ala2,Leu5,Cys6]enkephalin (DALCE) is a synthetic enkephalin analog which contains a SH group. DALCE binds with high affinity to δ-receptors, with moderate affinity to μ-receptors, and with negligible affinity to κ-receptors. Pretreatment of rat brain membranes with DALCE resulted in concentration-dependent loss of δ-binding sites. Using 2 nM [3H][D-Pen2,D-Pen5]enkephalin (where Pen represents penicillamine) to label δ-sites, 50% loss of sites occurred at .apprx.3 μM DALCE. Loss of sites was not reversed by subsequent incubation in buffer containing 250 mM NaCl or 100 μM guanyl-5'-yl imidodiphosphate (Gpp(NH)p), conditions which cause dissociation of opiate agonists. By contrast, the enkephalin analogs [D-Ala2,D-Leu5]enkephalin, [D-Ser2,Leu5,Thr6]enkephalin, [D-Pen2,D-Pen5]enkephalin, and [D-Ala2,D-Leu5,Lys6]enkephalin were readily dissociated by NaCl and Gpp(NH)p, producing negligible loss at 3 μM. This suggests that DALCE binds covalently to the receptors. Pretreatment of membranes with the reducing agents dithiothreitol and β-mercaptoethanol had no effect on opiate binding. Thus, loss of sites required both specific recognition by opiate receptors and a thiol group. The irreversible effect of DALCE was completely selective for δ-receptors. Pretreatment with DALCE had no effect on binding of ligands to μ- or κ-receptors. The effect of DALCE on δ-binding was: (1) markedly attenuated by inclusion of dithiothreitol in the preincubation buffer, (2) partially reversed by subsequent incubation with dithiothreitol, (3) slightly enhanced when converted to the SS-linked dimer, and (4) prevented by blocking the DALCE SH group with N-ethylmaleimide or iodoacetamide. Thus, DALCE binds covalently to δ-receptors by forming a SS bond with a SH group in the binding site. The mechanism may involve a SH-SS exchange reaction.

IT **110881-59-9**
RL: BIOL (Biological study)
(δ-opioid receptors affinity labeling by, thiol-disulfide exchange reaction in)

L28 ANSWER 47 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1987:569052 HCAPLUS
DN 107:169052
TI Characterization of D-Ala2,Leu5,Cys6-enkephalin: a novel synthetic opioid peptide with slowed dissociation from delta receptors
AU Bowen, Wayne D.; Kelemen, Mark; Huey, Roger; Stewart, D.
CS Sect. Biochem., Brown Univ., Providence, RI, 02912, USA
SO NIDA Research Monograph (**1986**), 75(Prog. Opioid Res.), 193-6
CODEN: MIDAD4; ISSN: 0361-8595
DT Journal
LA English
AB [D-Ala2,Leu5,Cys6]enkephalin (DALCE) is a synthetic enkephalin analog which contains a reduced sulfhydryl group. It exhibited moderate δ selectivity (μ/δ median inhibitory concentration ratio, 13) in rat brain membrane prepns., but was not as selective as the disulfide-containing peptide, D-penicillamine2,5-enkephalin (DPDPE) (μ/δ ratio, 1121). However, unlike other δ-selective peptides, DALCE exhibited a markedly slowed dissociation from receptors after pretreatment of membranes with micromolar concns. Pretreatment of membranes with 10 μM DALCE, followed by extensive washing, produced an 85-90% loss of [3H]DPDPE binding sites. DADLE, [D-Ser2,Leu5,Thr6]enkephalin (DSTLE) and DPDPE produced losses of 59, 70, and 19%, resp. The effect of DALCE was not reversed by a 60 min postincubation in buffer containing 250 mM NaCl + 100 μM GMPPNP, a condition which produced nearly complete reversal of loss of sites by DADLE and DSTLE. DPDPE could be dissociated merely by postincubation in Tris-buffer alone for 15 min. The order for ease of dissociation after preincubation was DPDPE > DADLE > DSTLE >>> DALCE. The effect of DALCE was selective for δ sites, although higher concns. of DALCE produced loss of μ sites. DALCE pretreatment had no effect on recovery of κ sites. Apparently, DALCE binds essentially irreversibly to δ receptors.
IT **110881-59-9**
RL: PROC (Process)
(binding of, by δ-receptors of brain membrane, kinetics of)

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=> d his

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                E SHARMA SHUBH/AU
L2            53 E3-5
                E SHI Y/AU
                E SHI YI-QUN/AU
                E SHI YI QUN/AU
L3            11 E3
                E SHI Y Q/AU
L4            14 E3
                E YANG W/AU
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                E YANG WEI/AU
L6          1001 E3-87
                E CAI H Z/AU
L7             1 E3
                E CAI HUI/AU
L8            91 E3,E16
                E BLOOD C/AU
L9            13 E3,E9-10
                E SHADIACK A/AU
L10           21 E3-7
L11          138 PALATIN?/CS,PA
L12           17 L1-11 AND MELANOCORTIN/TI
L13            3 L12 AND METALLOPEPTID?

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L17           23 L16
L18               STR L16
L19            6 L18 CSS SAM
L20          260 L18 CSS FULL
                SAVE TEMP L20 RUS718FUL/A
L21           30 L20 AND SQL<=8
L22               STR L18
L23            0 L22 CSS SAM SUB=L20
L24            1 L22 CSS FULL SUB=L20
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L32           80 L31 NOT MULTICHAIN/NTE
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L35           2 L33 AND L11
L36           2 L34-35
L37          46 L33 NOT L34
L38          36 L37 AND (PRY<=1999 OR AY<=1999 OR PY<=1999 OR PRD<19990813 OR A

=> b hcap
FILE 'HCAPLUS' ENTERED AT 11:25:19 ON 21 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 21 Jun 2004  VOL 140 ISS 26
FILE LAST UPDATED: 20 Jun 2004  (20040620/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d bib abs hitrn l38 tot

L38  ANSWER 1 OF 36  HCAPLUS  COPYRIGHT 2004 ACS on STN
AN   2001:816705  HCAPLUS
DN   135:366701
TI   Fc-domain-modified peptides as therapeutic agents
IN   Feige, Ulrich; Liu, Chuan-Fa; Cheetham, Janet C.; Boone, Thomas Charles;
     Gudas, Jean Marie
PA   Amgen Inc., USA
SO   PCT Int. Appl., 176 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.         KIND  DATE          APPLICATION NO.  DATE
     ---------------    ----  --------      ---------------  --------
PI   WO 2001083525      A2    20011108      WO 2001-US14310  20010502
     WO 2001083525      A3    20020718
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
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BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1278778 A2 20030129 EP 2001-932951 20010502
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2003533187 T2 20031111 JP 2001-580949 20010502
US 2004077022 A1 20040422 US 2003-666696 20030919 <--
PRAI US 2000-563286 A 20000503
US 1998-105371P P 19981023 <--
US 1999-428082 A2 19991022 <--
WO 2001-US14310 W 20010502

AB The present invention concerns fusion of Fc domains with biol. active peptides and a process for preparing pharmaceutical agents using biol. active peptides. In this invention, pharmacol. active compds. are prepared by a process comprising: a) selecting at least one peptide that modulates the activity of a protein of interest; and b) preparing a pharmacol. agent comprising an Fc domain covalently linked to at least one amino acid of the selected peptide. Linkage to the vehicle increases the half-life of the peptide, which otherwise would be quickly degraded in vivo. The preferred vehicle is an Fc domain. The peptide can be selected, for example, by phage display, E.coli display, ribosome display, RNA-peptide screening, yeast-based screening, chemical-peptide screening, rational design, or protein structural anal.

IT **267881-98-1**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Fc-domain-modified peptides as therapeutic agents)

L38 ANSWER 2 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:314825 HCAPLUS
DN 132:343357
TI Peptides derived from claudins for modulation of cell adhesion and permeability barriers
IN Blaschuck, Orest W.; Symonds, James Matthew; Gour, Barbara J.
PA Adherex Technologies Inc., Can.
SO PCT Int. Appl., 121 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000026360	A1	20000511	WO 1999-CA1029	19991103 <--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002193294	A1	20021219	US 1998-185908	19981103 <--
	US 6723700	B1	20040420	US 1999-282029	19990330 <--
	EP 1127119	A1	20010829	EP 1999-953468	19991103 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2003524384	T2	20030819	JP 2000-579732	19991103 <--
PRAI	US 1998-185908	A	19981103 <--		
	US 1999-282029	A	19990330 <--		
	WO 1999-CA1029	W	19991103 <--		

OS MARPAT 132:343357

AB Peptides derived from the extracellular domains of claudins that can be used to increase or inhibit claudin-mediated cell adhesion in a variety of in vivo and in vitro contexts are provided. Within certain embodiments, the modulating agents may be used to increase blood/brain barrier permeability. The modulating agents comprise at least one claudin cell adhesion recognition sequence or an antibody or fragment thereof that specifically binds the claudin cell adhesion recognition sequence. Modulating agents may addnl. comprise one or more cell adhesion recognition sequences recognized by other adhesion mols. Such modulating agents may, but need not, be linked to a targeting agent, drug and/or support material. Representative peptides were found to alter the morphol. and growth habit of NRK cells in culture and to alter the elec. properties of monolayers of MDCK cells.

IT **267425-57-0 267425-63-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(claudin-derived peptide; peptides derived from claudins for modulation of cell adhesion and permeability barriers)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 3 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:291095 HCAPLUS

DN 132:329919

TI Modified peptides containing an antibody Fc domain as therapeutic agents

IN Feige, Ulrich; Liu, Chuan-fa; Cheetham, Janet; Boone, Thomas Charles

PA Amgen Inc., USA

SO PCT Int. Appl., 608 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2000024782	A2	20000504	WO 1999-US25044	19991025	<--
	WO 2000024782	A3	20020606			
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
	US 6660843	B1	20031209	US 1999-428082	19991022	<--
	EP 1144454	A2	20011017	EP 1999-971003	19991025	<--
	EP 1144454	A3	20020911			
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
	BR 9914708	A	20020716	BR 1999-14708	19991025	<--
	JP 2003512011	T2	20030402	JP 2000-578351	19991025	<--
	AU 767725	B2	20031120	AU 2000-12322	19991025	<--
	NZ 510888	A	20040130	NZ 1999-510888	19991025	<--
	ZA 2001002753	A	20020611	ZA 2001-2753	20010404	<--
	NO 2001001963	A	20010621	NO 2001-1963	20010420	<--
	BG 105461	A	20030430	BG 2001-105461	20010424	<--
	US 2004044188	A1	20040304	US 2003-609217	20030627	<--

	US 2004053845	A1	20040318	US 2003-632388	20030731 <--
	US 2004071712	A1	20040415	US 2003-645761	20030818 <--
	US 2004057953	A1	20040325	US 2003-651723	20030829 <--
	US 2004087778	A1	20040506	US 2003-653048	20030829 <--
	US 2004077022	A1	20040422	US 2003-666696	20030919 <--
PRAI	US 1998-105371P	P	19981023 <--		
	US 1999-428082	A	19991022 <--		
	WO 1999-US25044	W	19991025 <--		
	US 2000-563286	A1	20000503		

AB The present invention concerns fusion of Fc domains with biol. active peptides and a process for preparing pharmaceutical agents using biol. active peptides. In this invention, pharmacol. active compds. are prepared by a process comprising: (a) selecting at least one peptide that modulates the activity of a protein of interest; and (b) preparing a pharmacol. agent comprising an Fc domain covalently linked to at least one amino acid of the selected peptide. Linkage to the vehicle increases the half-life of the peptide, which otherwise would be quickly degraded in vivo. The preferred vehicle is an Fc domain. The peptide is preferably selected by phage display, Escherichia coli coli display, ribosome display, RNA-peptide screening, or chemical-peptide screening.

IT **267881-98-1D**, fusion protein with IgG1 Fc domain
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vasoactive intestinal polypeptide mimetic; modified peptides containing an antibody Fc domain as therapeutic agents)

L38 ANSWER 4 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:44927 HCAPLUS
DN 132:265477
TI Inhibitory specificity spectrum of peptide α-amylase inhibitors designed by limited combinatorial libraries
AU Doleckova, L.; Pavlik, M.; Mares, M.; Kluh, I.
CS Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague, Czech Rep.
SO Innovation and Perspectives in Solid Phase Synthesis & Combinatorial Libraries: Peptides, Proteins and Nucleic Acids--Small Molecule Organic Chemical Diversity, Collected Papers, International Symposium, 5th, London, Sept. 2-6, 1997 (**1999**), Meeting Date 1997, 277-278.
Editor(s): Epton, Roger. Publisher: Mayflower Scientific Ltd., Kingswinford, UK.
CODEN: 68OEAA
DT Conference
LA English
AB A symposium on the authors' use of combinatorial library techniques in synthesizing α-amylase-inhibiting low-mol. weight mimetic peptides.
IT **263398-25-0P 263398-30-7P 263398-31-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(inhibitory specificity spectrum of peptide α-amylase inhibitors designed by limited combinatorial libraries)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

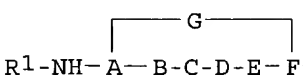
L38 ANSWER 5 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:492100 HCAPLUS
DN 131:252885
TI Discovery of novel peptidic dopamine transporter ligands by screening a positional scanning combinatorial hexapeptide library
AU Rothman, Richard B.; Baumann, Michael H.; Dersch, Christina M.; Appel, Jon; Houghten, Richard A.

CS Clinical Psychopharmacology Section, DIR, NIDA, NIH, Baltimore, MD, 21224, USA
SO Synapse (New York) (**1999**), 33(3), 239-246
CODEN: SYNAET; ISSN: 0887-4476
PB Wiley-Liss, Inc.
DT Journal
LA English
AB The acute reinforcing effects of cocaine are thought by some to result from cocaine binding to the dopamine (DA) transporter, which inhibits DA uptake and increases synaptic DA levels in the mesolimbic system. Other data suggest that neurotransmitters other than DA contribute to cocaine reinforcement and addiction. These considerations illustrate the need to have addnl. research tools with which to test the "DA hypothesis.". One strategy is to identify drugs which bind to the DA transporter (DAT ligands) but which do not inhibit DA uptake as effectively as cocaine. The purpose of the present study was to identify members of a novel structural class of DAT ligands and to characterize their interactions at the DA transporter. A positional scanning hexapeptide D-amino acid library was screened for inhibition of [125I]RTI-55 binding to rat caudate DA transporters. Based on the results, 12 peptides were synthesized. All 12 peptides inhibited [125I]RTI-55 binding to DA transporters with IC50 values, which ranged from 1.8 μM to 12 μM. The two most potent peptides (TPI-669-1 and TPI-669-4) were prepared in larger quantities and were characterized further for activity at the DAT and 5-HT transporter. Both peptides inhibited DA and 5-HT uptake and transporter binding with IC50/Ki values in the low micromolar range. In vivo microdialysis studies demonstrated that both peptides increase extracellular DA and 5-HT in the nucleus accumbens of rats. These data demonstrate that peptides can function as inhibitors of biogenic amine transport. Future work will focus on developing more potent and selective peptides.
IT **245044-92-2 245072-62-2**, TPI 669-4
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peptidic dopamine transporter ligands from combinatorial hexapeptide library screening)
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 6 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:350685 HCAPLUS
DN 131:19306
TI Preparation of cyclic peptides having VLA-4 (very late antigen-4) adhesion inhibitory activity and medicinal use thereof
IN Takahashi, Toshiya; Saito, Nobuo; Takeshige, Hideyuki; Tanaka, Toshiaki; Kainoh, Mie
PA Toray Industries, Inc., Japan
SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9925731	A1	19990527	WO 1998-JP5096	19981112	<--
	W: CA, JP, US					
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
	EP 970965	A1	20000112	EP 1998-953029	19981112	<--
	R: DE, FR, GB, IT					

US 6511961 B1 20030128 US 1999-341435 19990709 <--
PRAI JP 1997-311692 A 19971113 <--
WO 1998-JP5096 W 19981112 <--
OS MARPAT 131:19306
GI



I

AB Claimed are cyclic peptides represented by general formula [I; A, F = L- or D-Cys, -homo-Cys, -Pen, or -MprI, Asp, Glu, Aad, Dpr, Dab, Orn; B = L- or D-Ala, -Ala(t-Bu), -Val, -Leu, -Ile, -aIle, -Abu, -Nle, -Nva, -Tle, -Cha, -Chg, -Phe, -Phg, -Trp-, -Ala(3-Bzt), -Ala(1-Naph), -Ala(2-Naph), -Ala(2-Pyr), -Ala(2-Qui), -His, -Thi, -Ala(4-Thz), -2-Abz, -Pro, -homo-Pro, or -Tic; C = Asp analog, Glu analog, Aad analog, Asn analog, Gln analog, Ser, Ser(OMe), homo-Ser, Dpr, Dab, Orn, Met, Met(O), Met(O2), aIle, Nle, Nva, Chg, Phg, Tyr, Tle, etc.; D = L- or D-Tyr, -Ser, -homo-Ser, -Leu, -Ile, -aIle, -Nle, -Nva, -Chg, -Cha, -Val, Ala(t-Bu), -Abu, -Tle, -Ala, -Phg, -homo-Phe, -Phe, -Ala(2-Naph), -Ala(2-Pyr), -Ala(3-Bzt), Ala(1-Naph), -Ala(2-Qui), -Thi, -Ala(4-Thz), -2-Abz, -Trp, or -His; G = disulfide or amide bond; R1 = H, acyl; R2 = H, C1-6 linear or branched alkyl] and the use thereof as remedies for inflammations, in particular allergic inflammations or hepatitis. These peptides are useful for the treatment of inflammatory diseases, e.g. allergic inflammations such as bronchial asthma, atopic dermatitis, and allergic rhinitis, hepatitis, nephritis, chronic arthrorheumatism, autoimmune diseases, rejection after organ transplant, type-1 diabetes, Crohn's disease, reinfarction after surgery, and arteriosclerosis. H-Cys-Chg-Asp-His-Leu-Cys-OH (cyclic disulfide) in vitro inhibited the binding of VLA-4-IgG chimera protein to immobilized CS-1 peptide (H-Cys-Leu-His-Gly-Pro-Glu-Ile-Leu-Asp-Val-Pro-Ser-Thr-OH)with IC50 of 120 nM. H-Cys-Ile-Met(O)-His-Leu-Cys-OH (cyclic disulfide) in vivo inhibited the increase in serum level of aspartic acid aminotransferase (AST) and that of alanine aminotransferase (ALT) in mouse having concanavalin-induced hepatitis by 27.0 and 38.7% at 100 μg/kg, resp.

IT **226566-85-4P 226567-60-8P 226567-69-7P**
226568-05-4P 226568-08-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of cyclic peptides having VLA-4 (very late antigen-4) adhesion inhibitory activity for treatment of allergic inflammations and hepatitis)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 7 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:771963 HCAPLUS
DN 130:135821
TI Structural Basis for Inhibition of the Protein Tyrosine Phosphatase 1B by Phosphotyrosine Peptide Mimetics
AU Groves, Matthew R.; Yao, Zhu-Jun; Roller, Peter P.; Burke, Terrence R., Jr.; Barford, David
CS Laboratory of Molecular Biophysics Department of Biochemistry, University of Oxford, Oxford, OX1 3QU, UK
SO Biochemistry (**1998**), 37(51), 17773-17783

CODEN: BICHAW; ISSN: 0006-2960
PB American Chemical Society
DT Journal
LA English
AB Protein tyrosine phosphatases regulate diverse cellular processes and represent important targets for therapeutic intervention in a number of diseases. The crystal structures of protein tyrosine phosphatase 1B (PTP1B) in complex with small mol. inhibitors based upon two classes of phosphotyrosine mimetics, the (difluoronaphthylmethyl)phosphonic acids and the fluoromalonyl tyrosines, have been determined to resolns. greater than 2.3 Å. The fluoromalonyl tyrosine residue was incorporated within a cyclic hexapeptide modeled on an autophosphorylation site of the epidermal growth factor receptor. The structure of this inhibitor bound to PTP1B represents the first crystal structure of a non-phosphonate-containing inhibitor and reveals the mechanism of phosphotyrosine mimicry by the fluoromalonyl tyrosine residue and the nature of its interactions within the catalytic site of PTP1B. In contrast to complexes of PTP1B with phosphotyrosine-containing peptides, binding of the fluoromalonyl tyrosine residue to the catalytic site of PTP1B is not accompanied by closure of the catalytic site WPD loop. Structures of PTP1B in complex with the (difluoronaphthylmethyl)phosphonic acid derivs. reveal that substitutions of the naphthalene ring modulate the mode of inhibitor binding to the catalytic site and provide the potential for enhanced inhibitor affinity and the generation of PTP-specific inhibitors. These results provide a framework for the rational design of higher affinity and more specific phosphotyrosine mimetic inhibitors of not only protein tyrosine phosphatases but also SH2 and PTB domains.
IT **214774-75-1**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(structural basis for inhibition of protein tyrosine phosphatase 1B by phosphotyrosine peptide mimetics)
RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 8 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:606884 HCAPLUS
DN 129:310859
TI Potent inhibition of protein-tyrosine phosphatase-1B using the phosphotyrosyl mimetic fluoro-O-malonyl tyrosine (FOMT)
AU Roller, Peter P.; Wu, Li; Zhang, Zhong-Yin; Burke, Terrence R., Jr.
CS Laboratory of Medicinal Chemistry, Division of Basic Sciences, National Cancer Institute, Bethesda, MD, 20892, USA
SO Bioorganic & Medicinal Chemistry Letters (**1998**), 8(16), 2149-2150
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier Science Ltd.
DT Journal
LA English
AB To enhance protein-tyrosine phosphatase (PTP)-1B binding interactions, both inside and outside the pTyr binding pocket, a thioether-cyclized peptide has been designed based on the EGF receptor autophosphorylation sequence (EGFR988-993) "Asp-Ala-Asp-Glu-pTyr-Leu", in which the pTyr residue has been replaced by the nonphosphorus-containing pTyr mimetic fluoro-O-malonyltyrosine (FOMT). The resulting peptide exhibits a Ki value of 170 nM, making it one of the most potent inhibitors of PTP 1B yet reported.
IT **214774-75-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(potent inhibition of protein-tyrosine phosphatase-1B using cyclized peptide containing phosphotyrosyl mimetic fluoromalonyl tyrosine (FOMT))
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 9 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:717940 HCAPLUS
DN 127:331756
TI Conjugates of lipophilic moieties and fragments of vasoactive intestinal peptide (vip)
IN Gozes, Ilana; Fridkin, Matityahu
PA Yeda Research and Development Co. Ltd., Israel; Ramot University Authority for Applied Research and Industrial DevelopmentLt; Gozes, Ilana; Fridkin, Matityahu
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9740070	A1	19971030	WO 1997-IL129	19970418	<--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
	CA 2252458	AA	19971030	CA 1997-2252458	19970418	<--
	AU 9725753	A1	19971112	AU 1997-25753	19970418	<--
	AU 715036	B2	20000113			
	EP 904294	A1	19990331	EP 1997-917393	19970418	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
	CN 1219938	A	19990616	CN 1997-194970	19970418	<--
	IL 126622	A1	20010111	IL 1997-126622	19970418	<--
	JP 2001502294	T2	20010220	JP 1997-537899	19970418	<--
	TW 487711	B	20020521	TW 1997-86107759	19970605	<--
	US 6239107	B1	20010529	US 1999-171654	19990429	<--
PRAI	IL 1996-118003	A	19960423	<--		
	WO 1997-IL129	W	19970418	<--		

OS MARPAT 127:331756
AB Novel conjugates of peptides having 3-12 amino acid residues and lipophilic moieties, which may be present at the N- or C- terminal of the peptides, have been prepared for the treatment of male impotence or neurodegenerative diseases. Thus, peptide conjugate St-Lys-Lys-Tyr-Leu-NH2 (St = stearoyl) was prepared and assayed for neuronal survival (80-110% at 10-3-10-9 M).
IT **197908-00-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(conjugates of lipophilic moieties and fragments of vasoactive intestinal peptide)

L38 ANSWER 10 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:281127 HCAPLUS
DN 126:260618

TI Cyclic peptide mimics of RGD-binding sites and their use in inhibiting integrin-mediated cell attachment
IN Ruoslahti, Erkki; Pasqualini, Renata
PA La Jolla Cancer Research Foundation, USA
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9708203	A1	19970306	WO 1996-US14058	19960826 <--
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5817750	A	19981006	US 1995-520535	19950828 <--
	AU 9669109	A1	19970319	AU 1996-69109	19960826 <--
	US 5955572	A	19990921	US 1998-79432	19980514 <--
PRAI	US 1995-520535		19950828 <--		
	WO 1996-US14058		19960826 <--		

OS MARPAT 126:260618
AB The present invention provides cyclic peptides that recognize the arginine-glycine-aspartic acid (RGD) motif characteristics of many integrin ligands. These cyclic RGD-binding peptides, which comprise the motif (W/P)DD(G/L)(W/L)(W/L/M), have a structure that functionally mimics the RGD-binging site on an integrin. The invention further provides an antibody selectively reactive with a cyclic RGD-binding peptide containing the sequence (W/P)DD(G/L)(W/L)(W/L/M). The invention also provides a method to reduce or inhibit cell attachment to an RGD-containing ligand using a cyclic RGD-binding peptide of the invention. Phage display libraries were screened with fibronectin fragments to identify peptides with affinity for RGD-containing peptides. In a cell attachment assay, two of these (cyclized) peptides inhibited osteosarcoma cell line MG-63 binding to fibronectin and vitronectin. The identified RGD-binding peptides were shown to resemble a peptide from the β3 integrin subunit.
IT **188740-36-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(cyclic peptide mimics of RGD-binding sites and their use in inhibiting integrin-mediated cell attachment)

L38 ANSWER 11 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:226489 HCAPLUS
DN 126:199821
TI Synthesis and Application of Unprotected Cyclic Peptides as Building Blocks for Peptide Dendrimers
AU Zhang, Lianshan; Tam, James P.
CS Department of Microbiology and Immunology, Vanderbilt University, Nashville, TN, 37232-2363, USA
SO Journal of the American Chemical Society (**1997**), 119(10), 2363-2370
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
OS CASREACT 126:199821
AB The authors describe an efficient regiospecific method for cyclization of unprotected peptide segments based on intramol. transthioesterification of unprotected cysteinyl peptide thioesters under the control of ring-chain tautomeric equilibrium in aqueous buffered solns. at pH 5-7.5. The initial

cyclization to form an intramol. thioester under the ring-chain tautomeric equilibrium is reversible and could be performed in relatively high concns. without observable oligomerization. This method overcomes the limitation of conventional cyclization methods that require high dilns. The reaction becomes irreversible by a subsequent, spontaneous proximity-driven S- to N-acyl transfer to the adjacent Nα-amine of Cys to form an end-to-end cyclic peptide. The cyclization is regioselective. No side reactions were observed with side-chain functionalities such as the Nε-amine of Lys, thiol of internal Cys, or imidazole of His. Since a free thiol group was introduced to the product after cyclization, these cyclic peptides were exploited as building blocks for synthesizing peptides with unusual architectures such as bicyclic peptides containing end-to-end backbones and disulfide bridges as well as cascade branched peptide dendrimers.

IT **187803-73-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and application of unprotected cyclic peptides as building blocks for peptide dendrimers)

L38 ANSWER 12 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:123455 HCAPLUS
DN 126:220303
TI Potent inhibition of protein-tyrosine phosphatase by phosphotyrosine-mimic containing cyclic peptides
AU Akamatsu, Miki; Roller, Peter P.; Chen, Li; Zhang, Zhong-Yin; Ye, Bin; Burke, Terrence R., Jr.
CS Laboratory of Medicinal Chemistry, Division of Basic Sciences, National Cancer Institute, National Institutes of Health, Bethesda, MD, 20892, USA
SO Bioorganic & Medicinal Chemistry (**1997**), 5(1), 157-163
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier
DT Journal
LA English
AB In an effort to derive potent and bioavailable protein-tyrosine phosphatase inhibitors, we have previously reported hexameric peptides based on the epidermal growth factor receptor sequence EGFR988-993 (Asp-Ala-Asp-Glu-Xxx-Leu, where Xxx = Tyr), in which the tyrosyl residue has been replaced by the non-hydrolyzable phosphotyrosyl mimics phosphonomethylphenylalanine (Pmp), difluorophosphonomethylphenylalanine (F2Pmp), and O-malonyltyrosine (OMT). Inhibitory potencies (IC50 values) of these peptides against the tyrosine phosphatase PTP 1B were 200, 0.2 and 10 μM, resp. Since cellular penetration of peptides containing highly charged phosphonate residues is compromised, and good bioreversible protection strategies for the F2Pmp residue have not yet been reported, the OMT residue is of particular interest in that it affords potential new prodrug approaches. In the current study we have prepared cyclized versions of the OMT-containing EGFR988-993 peptide in order to increase its proteolytic stability and restrain conformational flexibility. Three different cyclic analogs were synthesized. Two of these were cyclized through the peptide backbone ("head to tail") using in one case a single glycine spacer (heptamer peptide) and in the second instance, two glycines (octamer peptide). In a PTP1-based assay the cyclic heptamer experienced a two-fold loss of potency (Ki = 25.2 ± 3.9 μM) relative to the linear hexamer parent (Ki = 13 ± 0.9 μM), while the cyclic octamer demonstrated a five-fold increase in potency (Ki = 2.60 ± 0.11 μM). The third peptide was cyclized by means of a sulfide bridge between the side chain of a C-terminally added cysteine residue and the β-carbon of a N-terminal acetyl residue. Although the overall size of this ring was identical to that exhibited by the preceding backbone-cyclized octamer, it displayed a three-fold enhancement in potency (Ki = 0.73 ±

0.03 μM). The structural basis for the observed results are discussed. Conformational restrictions induced by cyclization could aid in defining geometries for peptidomimetic design. Finally, it can be speculated that cyclization of other linear PTP-inhibitory peptides, such as the F2Pmp-containing hexamer, may also increase their potency.

IT **188398-12-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and inhibition of protein-tyrosine phosphatase by phosphotyrosine-mimic containing cyclic peptides)

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 13 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:117658 HCAPLUS
DN 126:141909
TI Group of peptides that act synergistically with hydrophobic antibiotics against gram-negative enteric bacteria. [Erratum to document cited in CA125:163069]
AU Vaara, Martti; Porro, Massimo
CS Dep. Bacteriology Immunology, Univ. Helsinki, Helsinki, 00014, Finland
SO Antimicrobial Agents and Chemotherapy (**1997**), 41(2), 496
CODEN: AMACCQ; ISSN: 0066-4804
PB American Society for Microbiology
DT Journal
LA English
AB The synthetic peptide KFFKFFKFF should read KFFKFFKFFK, and IKFLKFLKFL should read OKFLKFLKFLK. The index entries were corrected
IT **180205-58-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(synthetic cationic peptides that act synergistically with hydrophobic antimicrobials against gram-neg. enteric bacteria (Erratum))

L38 ANSWER 14 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:607995 HCAPLUS
DN 125:317948
TI Reversible affinity labeling of opioid receptors via disulfide bonding: discriminative labeling of μ and δ subtypes by chemically activated thiol-containing enkephalin analogs
AU Yasunaga, Teruo; Motoyama, Shihoko; Nose, Takeru; Kodama, Hiroaki; Kondo, Michio; Shimohigashi, Yasuyuki
CS Manuf. Process Dev. Div., Otsuka Pharm. Co., Ltd., Saga Factory, Saga, 842-01, Japan
SO Journal of Biochemistry (Tokyo) (**1996**), 120(2), 459-465
CODEN: JOBIAO; ISSN: 0021-924X
PB Japanese Biochemical Society
DT Journal
LA English
AB The 3-nitro-2-pyridinesulfenyl (Npys) group bound to a mercapto group is a highly activated electrophilic reagent, which only reacts with a free mercapto group to form a disulfide bond via the thiol-disulfide exchange reaction. The authors incorporated the Npys group into enkephalin analogs to affinity label μ and δ opioid receptors. When rat brain membranes were incubated with [D-Ala2,Leu(CH2SNpys)5]enkephalin, and assayed for the inhibition of binding of DAGO and DSLET enkephalin analogs to opioid receptors, the number of receptors decreased sharply, depending upon the concentration of this SNpys-containing enkephalin. It was found that this

enkephalin analog occupies μ receptors highly specifically (EC50 = 51 nM) and almost 100 times more selectively than δ receptors. In contrast, [D-Ala2,Leu5]enkephalyl-Cys(Npys)6 attached covalently to δ receptors (E50 = 34 nM) about 150 times more selectively than to μ receptors. Although N-ethylmaleimide also inhibited the binding of DAGO and DSLET, four to six orders of magnitude higher concns. were required as compared to SNpys-containing enkephalins. When enkephalin-bound rat membranes were treated with dithiothreitol, the loss of receptors was reversed, depending upon the concentration of and incubation time with dithiothreitol. The recovery was much faster (about 1000 times) for δ receptors than for μ receptors. The present results indicated that both μ and δ receptors in rat brain consist of a free mercapto group near the enkephalin binding site and that SNpys-containing enkephalins can label these mercapto groups discriminatively. The disulfide bond between [D-Ala2,Leu5]enkephalyl-Cys6 and δ receptors appears to be exposed, while that between [D-Ala2,Leu(CH2-SNpys)5]enkephalin and μ receptors is shielded.

IT **120866-05-9P**
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(reversible affinity labeling of μ and δ opioid receptor subtypes via disulfide bonding with chemical activated thiol-containing enkephalin analogs)

IT **183144-38-9P 183144-39-0P 183144-40-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reversible affinity labeling of μ and δ opioid receptor subtypes via disulfide bonding with chemical activated thiol-containing enkephalin analogs)

L38 ANSWER 15 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:469899 HCAPLUS
DN 125:163069
TI Group of peptides that act synergistically with hydrophobic antibiotics against gram-negative enteric bacteria
AU Vaara, Martti; Porro, Massimo
CS Dep. Bacteriology Immunology, Univ. Helsinki, Helsinki, 00014, Finland
SO Antimicrobial Agents and Chemotherapy (**1996**), 40(8), 1801-1805
CODEN: AMACCQ; ISSN: 0066-4804
PB American Society for Microbiology
DT Journal
LA English
AB A synthetic peptide, KFFKFFKFF, consisting of cationic lysine residues and hydrophobic phenylalanine residues was found to sensitize gram-neg. bacteria to hydrophobic and amphipathic antibiotics. At a concentration of 3 μg/mL, it decreased the MIC of rifampin for smooth, encapsulated Escherichia coli by a factor of 300. Other susceptible bacterial species included Enterobacter cloacae, Klebsiella pneumoniae, and Salmonella typhimurium, but Pseudomonas aeruginosa was resistant. Similar results were obtained with another synthetic peptide, IKFLKFLKFL. The fractional inhibitory concentration indexes for the synergism of these peptides with rifampin, erythromycin, fusidic acid, and novobiocin were very close to those determined for the previously characterized potent outer-membrane-disorganizing agents polymyxin B nonapeptide and deacylpolymyxin B. KFFKFFKFF had direct activity against the gram-pos. organism Micrococcus strain ML36, was strongly hemolytic, and was as active on polymyxin-resistant E. coli mutants as on their parent. These three attributes made KFFKFFKFF different from polymyxin derivs. and similar to cationic detergents, such as cetylpyridinium chloride. However, whereas the MIC of cetylpyridinium chloride for E. coli is low (0.5 to 4

μg/mL), that of KFFKFFKFF is much higher (30 to 100 μg/mL). Other groups of synthetic peptides studied included polymyxin-like peptides with an intrachain disulfide bridge. Their synergism with antibiotics was less marked. Still other peptides, including KEKEKEKEKE and KKKKKKFLFL, lacked any synergism with the probe antibiotics.

IT **180205-58-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(synthetic cationic peptides that act synergistically with hydrophobic antimicrobials against gram-neg. enteric bacteria)

L38 ANSWER 16 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:285986 HCAPLUS
DN 125:1563
TI The recovery of affinity-labeled opioid receptors to their intact forms
AU Yasunaga, Teruo; Motoyama, Shihoko; Shimohigashi, Yasuyuki; Kondo, Michio; Ohno, Motonori
CS Manufacturing Process Development Division, Otsuka Pharmaceutical Co., Ltd., Kanzaki, 842-01, Japan
SO Peptide Chemistry (**1996**), Volume Date 1995, 33rd, 273-276
CODEN: PECHDP; ISSN: 0388-3698
PB Protein Research Foundation
DT Journal
LA English
AB Enkephalin analogs, containing an Npys-activated mercapto group affinity-labeled the thiol of opioid receptors presumably by thiol-disulfide exchange reaction (Npys = 3-nitro-2-pyridinesulfenyl). To demonstrate such a putative disulfide bonding in affinity-labeling, the effect of dithiothreitol (DTT) was examined DTT-treatment after affinity-labeling increased the number of open receptors. The results indicated that Npys-enkephalins bind to the receptors via disulfide bonding.
IT **120866-05-9**
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
(Npys-containing enkephalin analogs affinity-labeling of opioid receptors)

L38 ANSWER 17 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:207549 HCAPLUS
DN 124:279362
TI Inhibition of angiotensin converting enzyme and potentiation of bradykinin by retro-inverso analogs of short peptides and sequences related to angiotensin I and bradykinin
AU Carmona, Adriana K.; Juliano, Luiz
CS Dep. Biophysics, Escola Paulista Medicina, Sao Paulo, Brazil
SO Biochemical Pharmacology (**1996**), 51(8), 1051-60
CODEN: BCPCA6; ISSN: 0006-2952
PB Elsevier
DT Journal
LA English
AB There is pharmacol. evidence indicating that, in addition to the inhibition of angiotensin converting enzyme (ACE; EC 3.4.15.1), the potentiation of bradykinin (BK) responses may also involve the BK receptor or some binding site in the structures involved in the contractile response to this peptide. Dipeptides such as Val-Trp and some of its analogs as well as tripeptide homologs, including total and partial retro-inverso peptides, were synthesized and assayed for their ability to inhibit purified guinea pig plasma ACE and to potentiate the action of BK on the isolated ileum of

the same species. The peptides containing the P2-P1, P1-P'1, and P'1-P'2 inverted amide bonds inhibited ACE, were resistant to hydrolysis, and, depending on the amino acid composition, some of them potentiated the contractile response to BK while others did not. Des-[Arg1]-BK, which has an intrinsic activity at concns. higher than 10-5M, and the very dissimilar angiotensin I (AI) analog [Cys5-Cys10]-angiotensin-I-(5-10)-amide, which has no detectable contractile activity, were able to inhibit ACE and potentiate BK. In contrast to these peptides, BPP5a and BPP9a from Bothrops jararaca venom, and potentiators B and C from Agkistrodon halys blomhoffi venom were more effective as BK potentiators than as ACE inhibitors. In conclusion, the authors have synthesized and assayed compds. that preferentially inhibit ACE, e.g. retro-inverso tripeptides, or potentiate the response of smooth muscle to BK, e.g. snake venom peptides.

IT **98122-92-0**, [Cys5-Cys10]-angiotensin-I-(5-10)-amide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(angiotensin converting enzyme inhibition and bradykinin potentiation by angiotensin I and bradykinin short peptide retro-inverso analogs)

L38 ANSWER 18 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:910956 HCAPLUS
DN 124:741
TI Screening of cyclic peptide phage libraries identifies ligands that bind streptavidin with high affinities
AU Giebel, Lutz B.; Cass, Robert; Milligan, Daniel L.; Young, Dennis; Arze, Rafael; Johnson, Charles
CS Department of Cytokine Biology, Arris Pharmaceutical Corporation, South San Francisco, CA, 94080, USA
SO Biochemistry (**1995**), 34(47), 15430-5
CODEN: BICHAW; ISSN: 0006-2960
PB American Chemical Society
DT Journal
LA English
AB The screening of combinatorial peptide libraries has emerged as an important tool in the discovery of novel substrates or ligands for enzyme and receptor targets. For example, screening linear peptide libraries using streptavidin as a model receptor system has previously identified many low-affinity peptide ligands, all of which contain the common motif His-Pro-Gln (HPQ). We reasoned that constraining the conformational freedom of linear peptides by cyclization in a library would yield peptide ligands of increased affinity. Three different cyclic peptide libraries were constructed in an M13 phage display system as N-terminal pIII protein fusions. The random peptide sequences were flanked by two cysteine residues, which allows efficient disulfide bond formation and cyclization during phage assembly. These cyclic peptide libraries were screened with streptavidin as the model receptor system. Many sequences, all of which contained the motif His-Pro-Gln (HPQ), were discovered, and in the preceding paper, the structures of complexes of streptavidin-bound cyclic and linear peptides are described (Katz, 1995). Anal. of binding kinetics and affinities demonstrated that the conformationally constrained cyclic peptides bound streptavidin with affinities up to 3 orders of magnitude higher than linear peptides identified in previous library screens. These results demonstrate the potential of screening conformationally constrained peptide libraries for high-affinity novel receptor ligands or enzyme substrates.

IT **171116-15-7**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(screening of cyclic peptide phage libraries for identification of

substrates or ligands for enzyme and receptor targets)

L38 ANSWER 19 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:789404 HCAPLUS
DN 123:333284
TI Novel integrin-binding peptides and their analytical and therapeutic uses in the control of cellular adhesion
IN Ruoslahti, Erkki; Koivunen, Erkki
PA La Jolla Cancer Research Foundation, USA
SO PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9514714	A1	19950601	WO 1994-US13542	19941122 <--
	W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, UZ, VN				
	RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5981478	A	19991109	US 1994-286861	19940804 <--
	CA 2177070	AA	19950601	CA 1994-2177070	19941122 <--
	AU 9512596	A1	19950613	AU 1995-12596	19941122 <--
	AU 682561	B2	19971009		
	EP 730607	A1	19960911	EP 1995-903595	19941122 <--
	EP 730607	B1	20010530		
	R: BE, CH, DE, DK, FR, GB, IT, LI, NL, SE				
	JP 09509142	T2	19970916	JP 1994-515220	19941122 <--
PRAI	US 1993-158001	A	19931124 <--		
	US 1994-286861	A	19940804 <--		
	WO 1994-US13542	W	19941122 <--		

OS MARPAT 123:333284
AB Novel integrin-binding peptides that bind to αv- or α5-containing integrins and can exhibit high binding affinity. They contain one of the following sequence motifs: RX1ETX2WX3 (especially RRETAWA); RGDGX in which Xn is an amino acid with a hydrophobic, aromatic side chain; the double cyclic CX1CRGDCX2C; and RLD. The peptides generally exhibit their highest binding affinity when they assume a conformationally stabilized configuration, e.g. by cyclization through disulfide bonds. These peptides may be used as affinity labels for purification and anal. of integrins, e.g. in the testing of the efficacy of integrin-binding pharmaceuticals such as antithrombotics. These peptides may also be useful as substrates for attachment of integrin-bearing cells to surfaces such as prosthetic devices or in preventing the unwanted binding of cells to a target, such as the binding of osteoclasts to bone in the treatment of of osteoporosis; the inhibition of angiogenesis, and as tumor inhibitors. Integrin-binding peptides were obtained by affinity purification of a phage display library containing random sequences in the display cassette by panning with integrins. Peptides specific for several different classes of integrin were obtained.
IT **168179-40-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(binding to αvβ5 integrin of; novel integrin-binding peptides and their anal. and therapeutic uses in control of cellular

adhesion)

IT **168178-20-9 168178-29-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(binding to α5β1 integrin of; novel integrin-binding peptides and their anal. and therapeutic uses in control of cellular adhesion)

L38 ANSWER 20 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:478310 HCAPLUS
DN 122:256395
TI Cyclic RGD and KGD peptides for treating thrombosis
IN Pierschbacher, Michael D.; Cheng, Soan; Craig, William S.; Tschopp, Juerg F.
PA La Jolla Cancer Research Foundation, USA
SO PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9500544	A1	19950105	WO 1994-US6913	19940617 <--
	W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 6017877	A	20000125	US 1994-246852	19940519 <--
	CA 2165332	AA	19950105	CA 1994-2165332	19940617 <--
	AU 9471127	A1	19950117	AU 1994-71127	19940617 <--
	EP 705274	A1	19960410	EP 1994-920270	19940617 <--
	EP 705274	B1	20000830		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 09501910	T2	19970225	JP 1994-503001	19940617 <--
	AT 195949	E	20000915	AT 1994-920270	19940617 <--
	US 5672585	A	19970930	US 1995-445745	19950522 <--
	US 6521594	B1	20030218	US 1995-445638	19950522 <--
	US 5780303	A	19980714	US 1995-459566	19950602 <--
PRAI	US 1993-79441	A	19930618 <--		
	US 1993-171068	A	19931220 <--		
	US 1990-506444	B2	19900406 <--		
	US 1991-681119	B1	19910405 <--		
	US 1993-50736	B2	19930414 <--		
	US 1994-246852	A1	19940519 <--		
	WO 1994-US6913	W	19940617 <--		

OS MARPAT 122:256395
AB Cyclic RGD and KGD peptides, synthesized by methods well-known in the art, inhibit platelet aggregation without causing prolonged bleeding time. Typically these peptides contain hydrophobic amino acids adjacent to the carboxy terminus of the RGD or KGD sequence. Peptides of the invention can also contain in addition to the hydrophobic amino acid an adjacent pos. charged amino acid. These peptides have a high affinity for the receptor IIb/IIIa and a low affinity for the fibronectin and vitronectin receptors. The peptides can be administered in a suitable physiol. acceptable carrier to therapeutically treat thrombosis.
IT **161790-78-9P 162096-99-3P 162097-00-9P 162097-03-2P 162097-05-4P 162097-06-5P 162097-07-6P 162097-08-7P 162097-09-8P 162097-13-4P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cyclic RGD and KGD peptides for treating thrombosis)

L38 ANSWER 21 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:267032 HCAPLUS
DN 122:56587
TI Preparation of pentapeptides with affinity to opioid receptors.
IN Fhoelenhag, Karin Ingeborg; Fryklund, Linda; Larsson, Bo Christer; Nyberg, Fred Jarl; Westin-Sjoedahl, Gertrud Elisabeth; Lundin, Ronny
PA Kabi Pharmacia AB, Swed.
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9412532	A1	19940609	WO 1993-SE986	19931118	<--
	W: AU, CA, FI, JP, NO, NZ, RU, US					
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
	CA 2149899	AA	19940609	CA 1993-2149899	19931118	<--
	AU 9455816	A1	19940622	AU 1994-55816	19931118	<--
	AU 684481	B2	19971218			
	JP 08507748	T2	19960820	JP 1993-513035	19931118	<--
	EP 745093	A1	19961204	EP 1994-901120	19931118	<--
	EP 745093	B1	20020123			
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
	RU 2131438	C1	19990610	RU 1995-113498	19931118	<--
	AT 212357	E	20020215	AT 1994-901120	19931118	<--
	PT 745093	T	20020731	PT 1994-901120	19931118	<--
	ES 2171445	T3	20020916	ES 1994-901120	19931118	<--
	JP 3470136	B2	20031125	JP 1994-513035	19931118	<--
	FI 9502455	A	19950519	FI 1995-2455	19950519	<--
	NO 9501990	A	19950519	NO 1995-1990	19950519	<--
	US 5872097	A	19990216	US 1995-433401	19950907	<--
PRAI	SE 1992-3496	A	19921120	<--		
	WO 1993-SE986	W	19931118	<--		

OS MARPAT 122:56587
AB Linear or cyclic pentapeptides with opioid receptor affinity having the sequence Tyr-X-Phe-Leu-Z (X, Z = amino acid residues or analogs; X and Z can be covalently coupled; when the peptide is linear, X = Ser, Gly, Pro, AMCA, D-Ala; Z = Glu, Gln; when the peptide is cyclic, X = D- or L-2,4-diaminobutyric acid, D- or L-Lys, D- or L-Orn, and D- or L-Cys; Z = Glu, Gln; with provisos), and derivs. thereof, were prepared Thus, H-Tyr-Ser-Phe-Leu-Glu-NH2, prepared by solid phase synthesis using BOC-protected amino acids on methylbenzhydrylamine resin, blocked 3H-labeled dihydromorphine in synaptic rat plasma membranes with Ki = 0.82 nM.
IT **159968-81-7P 159968-82-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pentapeptides with affinity to opioid receptors)

L38 ANSWER 22 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:66703 HCAPLUS
DN 122:204537
TI Design and synthesis of novel cyclic RGD peptides as highly potent and

selective GPIIb/IIIa antagonists
AU Cheng, S.; Craig, W. S.; Mullen, D.; Tschopp, J. F.; Dixon, D.; Pierschbacher, M. D.
CS Telios Pharmaceuticals, Inc., San Diego, CA, 92121, USA
SO Pept.: Chem., Struct. Biol., Proc. Am. Pept. Symp., 13th (**1994**), Meeting Date 1993, 384-6. Editor(s): Hodges, Robert S.; Smith, John A. Publisher: ESCOM, Leiden, Neth.
CODEN: 60LXAW
DT Conference
LA English
AB Several cyclic RGD peptides modeled around TP9021 were designed and their selectivity for GPIIb/IIIa antagonist activity was examined Structure activity relations are discussed.
IT **161790-77-8 161790-78-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(design and synthesis of novel cyclic RGD peptides as highly potent and selective GPIIb/IIIa antagonists and antiplatelet activity)

L38 ANSWER 23 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:450221 HCAPLUS
DN 121:50221
TI Selective affinity labeling of rat brain μ and δ opioid receptors by thiol-containing enkephalins
AU Yasunaga, Teruo; Nagaishi, Masaya; Shimohigashi, Yasuyuki; Kodama, Hiroaki; Kondo, Michio; Ohno, Motonori
CS Fac. Sci. Eng., Saga Univ., Saga, 840, Japan
SO Peptide Chemistry (**1993**), 31st, 333-6
CODEN: PECHDP; ISSN: 0388-3698
DT Journal
LA English
AB [D-Ala2,Leu(CH2S-Npys)5]enkephalin (I) and [D-Ala2,Leu5]enkephalyl-Cys(Npys)6 (II) bound to the ligand-binding sites of opioid receptors in rat brain membrane prepns. (Npys = 3-nitro-2-pyridinesulfenyl). If there was a free mercapto group near the peptide bound to the receptor, the Npys group would react with it to form a disulfide bound. Thus after preincubation with Npys-peptides the ordinary receptor binding assay using DAGO and DSLET for μ and δ opioid receptors, resp., was used to estimate the unlabeled receptors and consequently the amount of labeled receptors. It was found: (1) that I labels μ receptors more specifically than δ receptors, (2) that II labels δ receptors more specifically than μ receptors, and (3) that the opioid receptor proteins contain a free mercapto group in the ligand binding site and that Npys-containing enkephalin analogs can label them effectively.
IT **120866-05-9**
RL: ANST (Analytical study)
(opioid receptor labeling with, in brain, mercapto group at ligand binding site in relation to)

L38 ANSWER 24 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:153908 HCAPLUS
DN 120:153908
TI Stereospecific affinity labeling of δ-opioid receptors by enkephalin analogs containing S-activated cysteine residue at position 6
AU Yasunaga, Teruo; Kodaman, Hiroaki; Higo, Atsushi; Nagaishi, Masaya; Shimohigashi, Yasuyuki; Ohno, Motonori; Kondo, Michio
CS Fac. Sci. Eng., Saga Univ., Saga, 840, Japan
SO Pept. Chem. 1992, Proc. Jpn. Symp., 2nd (**1993**), Meeting Date 1992, 375-7. Editor(s): Yanaihara, Noboru. Publisher: ESCOM, Leiden,

Neth.
CODEN: 59NTAC
DT Conference
LA English
AB A series of 4 stereoisomeric [D-Ala5,Leu5]enkephalyl-Cys(Npys)6 (Npys is 3-nitro-2-pyridinesulfenyl) analogs was synthesized with the configurational combinations of L-L, L-D, D-L, and D-D at positions 5 and 6. These synthetic peptides were tested for their ability to displace the δ-opioid receptor ligand [D-Ser2,Leu5,Thr6]enkephalin and the μ-opioid receptor ligand [D-Ala2,MePhe4,Glyol5]enkephalin in rat brain membrane prepns. The enkephalin analogs containing L-Leu5 exhibited a higher affinity for the δ receptors than did the D-Leu5-containing analogs. The L-L and L-D analogs were 2-3-fold more selective for δ receptors than for μ receptors, whereas the D-L and D-D analogs were μ receptor-selective.
IT **120866-05-9P 153369-18-7P 153369-19-8P 153369-20-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and opioid receptor subtypes affinity labeling by)

L38 ANSWER 25 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:102428 HCAPLUS
DN 118:102428
TI Compatibility of the S-(3-nitro-2-pyridinesulfenyl) protecting group with DCC/HOBt coupling chemistry
AU Matsueda, Rei; Higashida, Susumu; Albericio, Fernando; Andreu, David
CS Sankyo Co., Tokyo, Japan
SO Peptide Research (**1992**), 5(5), 262-4
CODEN: PEREEO; ISSN: 1040-5704
DT Journal
LA English
AB Two recent reports (Albericio, F.; et. al., 1989 and Ploux, O.; et. al., 1987) on the partial lability of the 3-nitro-2-pyridinesulfenyl (Npys) thiol protecting group towards 1-hydroxy-benzotriazole (HOBt) have prompted a rechecking of the chemical behavior of this group. Using both soluble and polymer-bound forms of Cys(Npys) as test materials, the complete stability of this protection against HOBt has now been definitively established, and its compatibility with tert-butoxycarbonyl (Boc)-benzyl-based solid-phase synthesis strategies has been clearly confirmed by stability assays against a wide range of reagents, as well as by the successful synthesis of several Cys(Npys)-containing peptides.
IT **143642-69-7P 145904-00-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by solid-phase tert-butoxycarbonyl-benzyl method, nitropyridinesulfenyl protective group stability in)

L38 ANSWER 26 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:592349 HCAPLUS
DN 117:192349
TI Conformationally constrained peptides I
IN Bhatnagar, Pradip Kumar; Jarlais, Renee Louise Des; Dixon, James Scott; Hendrickson, Wayne Arthur; Kopple, Kenneth D.; Kwong, Peter; Peishoff, Catherine Elizabeth; Ryu, Seong Eon; Truneh, Alemseged; Sweet, Raymond W.
PA Smithkline Beecham Corp., USA; Columbia University
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 9209625	A1	19920611	WO 1991-US8873	19911127 <--
	W: AU, CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AU 9191188	A1	19920625	AU 1991-91188	19911127 <--
PRAI	US 1990-619782		19901129 <--		
	WO 1991-US8873		19911127 <--		

OS MARPAT 117:192349
GI For diagram(s), see printed CA Issue.
AB Peptides X-A-B-C-D-Y (A-B-C-D = β-turn tetrapeptide, β-turn tetrapeptide mimic able to bind to a HIV envelope protein; X, Y = groups restricting the stereochem. structure of A-B-C-D to a β-turn or β-turn mimic) were prepared as HIV infection inhibitors (no data). Thus, peptides I and II (X1 = Gly, X2 = Thr; X1, X2 = bond) were prepared by solid-phase synthesis.
IT **143412-02-6P**
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase synthesis of, as HIV inhibitor)

L38 ANSWER 27 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:551411 HCAPLUS
DN 117:151411
TI Synthesis of equimolar multiple oligomer mixtures, especially of oligopeptide mixtures
IN Houghten, Richard A.; Cuervo, Julio Hernan; Pinilla, Clemencia; Appel, Jon R., Jr.; Blondelle, Silvie
PA Interex Pharmaceuticals Ltd. Partnership, USA
SO PCT Int. Appl., 197 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9209300	A1	19920611	WO 1991-US8694	19911120 <--
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	CA 2090860	AA	19920522	CA 1991-2090860	19911120 <--
	CA 2090860	C	20030916		
	AU 9191418	A1	19920625	AU 1991-91418	19911120 <--
	AU 668347	B2	19960502		
	EP 558671	A1	19930908	EP 1992-902209	19911120 <--
	EP 558671	B1	19990127		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 06507378	T2	19940825	JP 1992-502640	19911120 <--
	JP 3523252	B2	20040426		
	AT 176239	E	19990215	AT 1992-902209	19911120 <--
	ES 2129442	T3	19990616	ES 1992-902209	19911120 <--
	US 5504190	A	19960402	US 1994-253854	19940603 <--
PRAI	US 1990-617023	A	19901121 <--		
	US 1991-701658	A	19910516 <--		
	US 1991-797551		19911119 <--		
	WO 1991-US8694	A	19911120 <--		

AB A method is described for preparing mixts. of oligopeptides by the solid-phase method. These mixts. were then tested by a monoclonal antibody binding assay to identify the most active sequences, as well as for bactericidal, fungicidal, and virucidal activity. Thus, Ac-Arg-Arg-Trp-Trp-Cys-Arg-NH2 had a monoclonal antibody-binding Ed50 of 3.4 μg/mL and a min. inhibitory concentration against Staphylococcus aureus of 3.2-6.5 μg/mL.

IT **143459-89-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and bactericidal activity of)

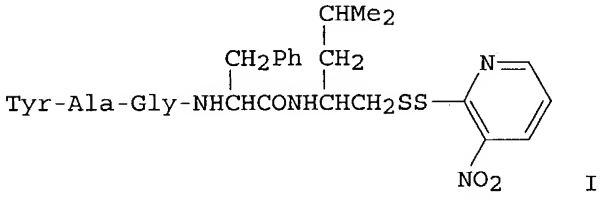
L38 ANSWER 28 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:551375 HCAPLUS
DN 117:151375
TI Design and synthesis of highly specific and selective enkephalin analog containing S-Npys-cysteine for δ opioid receptors
AU Matsueda, Rei; Yasunaga, Teruo; Kodama, Hiroaki; Kondo, Michio; Costa, Tommaso; Shimohigashi, Yasuyuki
CS New Lead Res. Lab., Sankyo Co., Ltd., Tokyo, 140, Japan
SO Chemistry Letters (**1992**), (7), 1259-62
CODEN: CMLTAG; ISSN: 0366-7022
DT Journal
LA English
AB Enkephalin analogs containing S-(3-nitro-2-pyridinesulfenyl)cysteine at positions 1, 5, or 6 were prepared for searching possible thiol groups in opioid receptors. In the radioligand receptor assay and biol. assays, analog H-D-Ala-Gly-Phe-Leu-Cys(Npys)-OH (Npys = 3-nitro-2-pyridinesulfenyl) exhibited a very high affinity and selectivity for δ over μ receptors, and its covalent attachment to δ receptors through disulfide bonding was evidenced.
IT **120866-06-0P 143642-69-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and opioid receptor selectivity of)

L38 ANSWER 29 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:427115 HCAPLUS
DN 117:27115
TI Stability of the S-NPYS protecting group against HOBT
AU Matsueda, Rei; Higashida, Susumu; Albericio, Fernando; Andreu, David
CS New Lead Res. Lab., Sankyo Co., Ltd., Tokyo, 140, Japan
SO Peptide Chemistry (**1992**), Volume Date 1991, 29th, 111-14
CODEN: PECHDP; ISSN: 0388-3698
DT Journal
LA English
AB A symposium report on the stability of the S-Npys (Npys = 3-nitro-2-pyridinesulfenyl) protective group against 1-hydroxybenzotriazole (HOBt). The S-Npys group is absolutely stable against HOBt. Cathepsin B inhibitor Ac-Phe-Arg-Arg-Cys(Npys)-Phe-OH, opiate δ-receptor sp. labeling ligand H-Tyr-D-Ala-Gly-Phe-Leu-Cys(Npys)-OH, and thrombin- and plasmin-induced platelet aggregation selective inhibitor H-Phe-Gln-Val-Val-Cys(Npys)-Gly-NH2 were prepared by the solid-phase via DCC/HOBt couplings.
IT **120866-05-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by solid-phase method via dicyclohexylcarbodiamide/hydroxybenzotriazole couplings)

L38 ANSWER 30 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:151975 HCAPLUS
DN 112:151975
TI Interaction of S-activated enkephalin analogs with opiate receptors
AU Kodama, Hiroaki; Shimohigashi, Yasuyuki; Ogasawara, Tomio; Koshizaka, Takuya; Kurono, Masayasu; Matsueda, Rei; Soejima, Kaori; Kondo, Michio; Yagi, Kunio
CS Fac. Sci. Eng., Saga Univ., Honjo, 840, Japan

SO Biochemistry International (**1989**), 19(6), 1159-64
CODEN: BIINDF; ISSN: 0158-5231
DT Journal
LA English
AB Enkephalin analogs containing a thiol activated by a thiomethyl (SCH3) or 3-nitro-2-pyridinesulfenyl (Npys) group were synthesized. Incubation of such S-activated enkephalin analogs as [D-Ala2,Leu(CH2S)SCH35]enkephalin or [D-Ala2,Leu(CH2S)Npys5]-enkephalin with guinea pig ileum (GPI) resulted in the continuous stimulation of the μ opiate receptors. This sustained GPI-activity was completely reversed with the antagonist naloxone, and subsequent washings elicited again the full enkephalin activity. When GPI showing full enkephalin activity was incubated with 1 mM dithiothreitol, .apprx.70% of the activity was eliminated. Examination of enkephalin analogs containing Cys(NPys) at position 1, 5, or 6 suggested that only 1 thiol group exists near the binding site of the μ receptor in GPI. Similar results were also obtained for the μ receptors in mouse vas deferens.
IT **120866-05-9 126071-09-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(biol. activity of, opioid receptor mediation of, structure in relation to)

L38 ANSWER 31 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1989:400894 HCAPLUS
DN 111:894
TI Opiate-receptor interaction of enkephalin analogs containing activated mixed-disulfide
AU Kodama, Hiroaki; Soejima, Kaori; Kondo, Michio; Matsueda, Rei; Shimohigashi, Yasuyuki; Ogasawara, Tomio; Koshizaka, Takuya; Kurono, Masayasu; Yagi, Kunio
CS Fac. Sci. Eng., Saga Univ., Saga, 840, Japan
SO Peptide Chemistry (**1989**), Volume Date 1988, 26th, 51-6
CODEN: PECHDP; ISSN: 0388-3698
DT Journal
LA English
GI



I

AB To determine the role of the thiol group in opiate receptor binding, 3-nitro-2-pyridinesulfenyl (NPYS) was used for thiol activation of enkephalins, and the biol. activity of these enkephalin analogs was investigated using the guinea pig ileum smooth muscle (GPI) and mouse was deferens (MVD) assay. [D-Ala2,Leu(CH2S)NPYS5]-enkephalin (I) had a similar activity as [D-Ala2,Leu(CH2S)SCH35] enkephalin (Enk-SSCH3) in the MVD assay, whereas it was less potent (6-fold) in the PGI assay. The wash-out of these peptides from the receptor prepns. was very difficult at higher doses (100 nM) compared with standard enkephalins. The sustained GPI-activity of I (1 μM) was completely reversed with the μ-selective antagonist naloxone (10 μM). However, the washings

after naloxone treatment elicited full I activity. In contrast, inhibition of ENK-SNPYS activity with dithiothreitol (DTT) (1 mM) was not reversed by washing. Thus, I was covalently linked to μ-receptors through a disulfide linkage which was cleaved reductively by DTT. In the MVD which contains predominantly δ-receptors in addition to μ- and κ-receptors, I showed 51% activity following washings, was completely inhibited by naloxone, and 35% reactivation occurred following subsequent washings. DTT treatment completely eliminated I activity. Using the δ-selective DADLE and the μ-selective DAGO on I-treated MVD it was shown that although MVD contains both δ- and μ-receptors, only μ-receptors cross-link with I. To determine other possible thiol groups in the receptor, enkephalin analogs were synthesized by replacing amino acids at position 1, 5, or 6 by Cys(NPYS). The biol. activities of these analogs on GPI indicated no other thiol groups in the enkephalin binding sites. However, in MVD [L-Ala2,Cys(NPYS)2]Enk and [D-Ala2,Leu5]Enk-Lys(NPYS)6 were fairly active.

IT **120866-05-9 120866-06-0**
RL: PROC (Process)
(opioid receptor binding of, disulfide linkage in)

L38 ANSWER 32 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:456803 HCAPLUS
DN 105:56803
TI Renin inhibition by linear and conformationally restricted analogs of renin substrate
AU Nakaie, Clovis R.; Pesquero, Jorge L.; Oliveira, Maria C. F.; Juliano, Luiz; Paiva, Antonio C. M.
CS Dep. Biophys., Esc. Paulista Med., Sao Paulo, 04034, Brazil
SO Pept.: Struct. Funct., Proc. Am. Pept. Symp., 9th (**1985**), 755-8
CODEN: 54ZNAJ
DT Conference
LA English
AB A series of linear and cyclic analogs of the equine angiotensinogen (I)-6-11) sequence (His-Pro-Phe-His-Leu-Leu) were synthesized and assayed as potential renin (II) inhibitors. The pK values of the titratable groups were also determined in order to obtain some information about the conformational state of these mols. The inhibitory peptides containing the His-Pro-Phe-His sequence bound to subsites S2-S5 in the II active center as long as the residues corresponding to I positions 10 and 11 were present to favor binding of inhibitor to enzyme. The stabilization of the β-turn conformation of the His-Pro-Phe-His segment by an SS bridge between the 2 cysteines in Cys-His-Pro-Phe-His-Cys-NH2 to form a cyclic peptide proved to be the best inhibitor in the series. The results gave further support to the idea that a β-turn-like structure involving the His-Pro-Phe-His region of I, and of competitive inhibitors containing this sequence, may be regarded as a possible binding conformation.

IT **98122-92-0**
RL: BIOL (Biological study)
(renin inhibition by, conformation in relation to)

IT **98122-91-9**
RL: BIOL (Biological study)
(renin response to, conformation in relation to)

L38 ANSWER 33 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1985:518663 HCAPLUS
DN 103:118663
TI Importance of substrate conformation for renin activity
AU Oliveira, Maria C. F.; Nakaie, Clovis R.; Pesquero, Jorge L.; Paiva, Antonio C. M.
CS Dep. Biophys., Esc. Paul. Med., Sao Paolo, 04034, Brazil

SO Prog. Bioorg. Chem. Mol. Biol., Proc. Int. Symp. Front. Bioorg. Chem. Mol. Biol. (**1984**), 127-32. Editor(s): Ovchinnikov, Yu. A. Publisher: Elsevier, Amsterdam, Neth.
CODEN: 53SHAR
DT Conference
LA English
AB Conformationally restricted analogs of angiotensinogen fragments were prepared and studied as possible inhibitors of human renin. The cyclic peptides, Cys-His-Pro-Phe-His-Cys and Cys-His-Pro-Phe-His-Cys-NH2 (containing cystine disulfide bonds), had Ki values for renin of 33 and 7.5 μM, resp., demonstrating that a free C-terminal carboxyl group interfered with the interaction of the peptides with the enzyme active site. Linear analogs of the angiotensinogen-(6-11) sequence and the corresponding cyclic analogs (obtained by amide bond formation between the C-terminal carboxyl and N-terminal amino groups) were also tested as renin inhibitors. The inhibitory peptides containing the His6-Pro7-Phe8-His9 sequence bound to the S2-S5 subsites of the renin active site, with this binding being favored by the β-turn conformation of the Pro10-Phe11 segment.
IT **98122-91-9P 98122-92-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and human renin inhibition by, structure-activity relations in)

L38 ANSWER 34 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1984:631013 HCAPLUS
DN 101:231013
TI Phosphinyl- and phosphinothioylamino acids and peptides. VIII. New practical removal conditions for the S-Mpt group and their application for the synthesis of bis[N,N-diallyl-[D-Ala2, L-Leu5]-enkephalyl]cystine
AU Ueki, Masaaki; Shinozaki, Kozo
CS Dep. Appl. Chem., Sci. Univ. Tokyo, Tokyo, 162, Japan
SO Bulletin of the Chemical Society of Japan (**1984**), 57(8), 2156-61
CODEN: BCSJA8; ISSN: 0009-2673
DT Journal
LA English
GI

(allyl)2-Tyr-D-Ala-Gly-Phe-Leu-Cys-OH
|
(allyl)2-Tyr-D-Ala-Gly-Phe-Leu-Cys-OH I

H-Tyr-D-Ala-Gly-Phe-Leu-Cys-OH
|
H-Tyr-D-Ala-Gly-Phe-Leu-Cys-OH VI

AB Title enkephalin analog I was prepared by conventional solution methods using the dimethylphosphinothioyl (Mpt) group for the protection of the SH group of cysteine. Mp was removed without damaging the allyl group by mild removal conditions using KF/18-crown-6 in MeCN/MeOH. Thus, Z-Tyr(CMe3)-D-ala-Gly-OEt (Z = PhCH2O2C) was Z-deblocked, treated with allyl bromide, and then saponified to give (allyl)2-Tyr(CMe3)-D-Ala-Gly-OH (II), whereas H-Phe-Leu-Cys(Mpt)-OCH2C6H4OMe-p.HCl (III) was prepared by stepwise couplings. II was coupled with III by DCC/1-hydroxybenzotriazole to give (allyl)2-Tyr(CMe3)-D-Ala-Gly-Phe-Leu-Cys(Mpt)-OCH2C6H4OMe-p (IV), which was deblocked by CF3CO2H to give (allyl)2-Tyr-D-Ala-Gly-Phe-Leu-Cys(Mpt)-OH (V). IV and V were both converted to I. Enkephalin analog VI was also prepared

IT **93450-66-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deblocking and disulfide coupling reaction of)
IT **93450-69-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deblocking of)
IT **93450-70-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deblocking-disulfide coupling reaction of)
IT **93450-67-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and disulfide coupling reaction of)

L38 ANSWER 35 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1984:525749 HCAPLUS
DN 101:125749
TI Conformational aspects of angiotensinogen analogs with renin inhibitory activity
AU Liepina, I.; Nikiforovich, G. V.; Paiva, Antonio C. M.
CS Inst. Org. Synth., Riga, 226006, USSR
SO Biochemical and Biophysical Research Communications (**1984**), 122(2), 700-5
CODEN: BBRCA9; ISSN: 0006-291X
DT Journal
LA English
AB Linear and cyclic peptides containing the His6-Pro7-Phe8-His9 sequence of renin's substrate (angiotensinogen) were shown to be effective competitive inhibitors of the enzyme. Calcns. and comparison of low-energy structures for these peptides give support to the existence of a β-turn-like structure involving the His-Pro-Phe-His region of the renin substrate and of the competitive inhibitors containing that sequence. This structure may be regarded as a possible inhibition conformation, occurring in the process of binding to renin.
IT **91990-58-8**
RL: BIOL (Biological study)
(renin inhibition by, conformation in relation to)

L38 ANSWER 36 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1982:35704 HCAPLUS
DN 96:35704
TI Protection of side chain functional groups of amino acids by phosphinothioyl groups
AU Ueki, Masaaki; Shinozaki, Kozo; Inazu, Toshiyuki
CS Dep. Appl. Chem., Sci. Univ. Tokyo, Tokyo, 162, Japan
SO Peptide Chemistry (**1980**), 18th, 37-40
CODEN: PECHDP; ISSN: 0388-3698
DT Journal
LA English
AB The use of title groups, e.g., Me2P(S) (Mpt) and pH2P(S) (Ppt), for the protection of OH and SH groups in peptide synthesis was studied. The N-Mpt group can be cleaved by acid, whereas the O-Mpt group is stable under acidic conditions but can be removed by alkaline hydrolysis or ester exchange reaction. Cysteine was treated with Ppt-Cl in aqueous dioxane in the presence of Et3N to give H-Cys(Ppt)-OH or Ppt-Cys(Ppt)-OH, depending on the ratios of reagents. Cysteine underwent a Schotten-Baumann type reaction with Mpt-Cl to give Mpt-Cys(Mpt)-OH, which was selectively

cleaved by HCl to give H-Cys(Mpt)-OH. Boc-Ala-Cys(R)-OMe [Boc = Me3CO2C, R = Ppt, Mpt, Et2P(S), Et2P(O)] were stable under neutral conditions, but they underwent decomposition in the presence of Et3N to give Boc-Ala-ΔAla-OMe. Boc-Tyr-D-Ala-Gly-Phe-Leu-Cys(Mpt)-OMe was prepared and then treated with base to give Boc-Tyr-D-Ala-Gly-Phe-Leu-ΔAla-OMe, which was deblocked to give H-Tyr-D-Ala-Gly-Phe-Leu-ΔAla-OH.

IT **79259-38-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and decomposition of)

IT **79259-35-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and partial deblocking of)

IT **79259-37-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and peptide coupling of, with tyrosine derivative)

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FILE LAST UPDATED: 20 Jun 2004  (20040620/ED)

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L36  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2004 ACS on STN
AN   2002:637480  HCAPLUS
DN   137:190724
TI   Melanocortin metallopeptides for treatment of sexual dysfunction
IN   Sharma, Shubh D.; Shi, Yi-qun; Yang, Wei;
     Cai, Hui-zhi; Shadiack, Annette
PA   Palatin Technologies, Inc., USA
SO   PCT Int. Appl., 58 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.         KIND  DATE           APPLICATION NO.  DATE
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PI   WO 2002064091      A2    20020822       WO 2002-US4431   20020213
     WO 2002064091      A3    20030313
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2004038897      A1    20040226       US 2003-640755   20030813
PRAI US 2001-268591P    P     20010213
     WO 2002-US4431     A     20020213
OS   MARPAT 137:190724
AB   Metallopeptides are provided for use in treatment of sexual dysfunction in
     mammals.  The metallopeptides are agonists for at least one of
     melanocortin-3 or melanocortin-4 receptors.  The metallopeptides are
     conformationally fixed on complexation of a metal ion-binding portion
```

thereof with a metal ion. Also provided are metallopeptides that are antagonists for at least one of melanocortin-3 or melanocortin-4 receptors.

IT **448903-52-4 448903-54-6 448904-08-3**
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanocortin metallopeptides for treatment of sexual dysfunction)

L36 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:137478 HCAPLUS
DN 134:188233
TI Melanocortin metallopeptide constructs, combinatorial libraries, and applications
IN **Sharma, Shubh D.; Shi, Yi-Qun; Yang, Wei; Cai, Hui-Zhi**
PA **Palatin Technologies, Inc., USA**
SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001013112	A1	20010222	WO 2000-US16396	20000615
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1208377	A1	20020529	EP 2000-944681	20000615
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRAI US 1999-148994P	P	19990812		
WO 2000-US16396	W	20000615		

OS MARPAT 134:188233
AB Metallopeptides and metallopeptide combinatorial libraries specific for melanocortin receptors are provided, for use in biol., pharmaceutical and related applications. The metallopeptides and combinatorial libraries are made of peptides, peptidomimetics and peptide-like constructs, in which the peptide, peptidomimetic or construct is conformationally fixed on complexation of a metal ion-binding portion thereof with a metal ion.

IT **327606-44-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(melanocortin metallopeptide constructs, combinatorial libraries, and applications)

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